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                                                                      360
atcagctttc tagagtctcc aaatccagaa aacaaggact atgaagagcc aaagaaagta
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cggaaaccag gtagtctgga cattttcctt gctttttgat ttatttaggg gacaactgaa
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eccetgggcc tggctccaga cacetttgac gatacetatg tgggttgtgc agaggagatg
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gaggagaagg cagccccct gctaaaggag gaaatggccc accatgccct gctgcgggaa
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aactgtgttc cctgcaacca gtgtgggcca ggcatggagt tgtctaagga atgtggcttc
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                                                                      420
ggcttccaga aatgcaagoc ctgtctggac tgcgcagtgg tgaaccgctt tcagaaggca
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aattgttcag ccaccagtga tgccatctgc ggggactgct tgccaggatt ttataggaag
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600

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actaaaacat tatetteaeg ggaattgatt ttacgtette caaacacata tgecacetta
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eggteagect gteegageeg atgactgeag eteccaetgt gaeetggeee aeggetgetg
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cagtggctgg gcaggcaagt tctgtgacaa agatgaacat atctgtacca cgcagtcccc
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<213> Homo sapiens

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ggcattggca aggagacggc cagagagctc gctagccgag gagcccgagt ctatattgcc
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tgcagagatg tactgaaggg ggagtctgct gccagtgaaa tccgagtgga tacaaagaac
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teccaggtgc tggtgeggaa attggaceta tecgacacea aatetateeg ageetttget
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gagggettte tggcagagga aaagcagete catattetga teaacaatge gggagtaatg
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tattcagctg ctgcagcaga tactcattag ttaccaccag ggatctctga ctttcatgga
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gaatggcaac tgtcttctcc agctttttca gctgggcaag ctcctggttc aggcaagcca
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642

2280

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                                                                     600
atcatttaaa aaaataaatc gagctttgag tgttcttcga aggacaaaga gcgggagtgc
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ctgaagtaga caccacctg ggtcgtgtgc gaggccggca ggtgggcgtg aagggcacag
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accepettgt gaatgtettt etgggeatte catttgeeca geegecactg ggeectgace
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ggttctcagc cccacaccca gcacagccct gggagggtgt gcgggatgcc agcactgcgc
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ccccaatgtg cctacaagac gtggagagca tgaacagcag cagatttgtc ctcaacggaa
                                                                     360
aacagcagat cttctccgtt tcagaggact gcctggtcct caacgtctat agcccagctg
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aggtccccgc agggtccggt aggccg
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     <211> 416
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                                                                      120
totateacce tggageetge ceageegage gaaggggaca aegteacget ggtegteeat
                                                                      180
gggctttcgg gggaactgct cgcctacagc tggtatgcgg ggcccacact caqcqtqtca
                                                                      240
tacctggtgg ccagctacat cgtgagcaca ggcgatgaga ctcctggccc ggcccacacg
                                                                      300
gngcgggagg ctgtgcgccc cgatggcagc ctggacatcc agggcatcct gccccggcac
                                                                      360
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     <210> 779
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aattttgcaa ccttgttctt ttgatgctag tttaacqqat gaaqaqtccc ggaaaaattq
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ggaagaattt ggaaatccag atgggcctca aggtgtggta aatgatgatt ttaaaatatt
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ggcgatatgg tatatattat aaaaatgtta accagattaa aggaataata ttatttttt
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actaaactta tactcacatg gagtttaaca tagataaatt gagctctcat taatttttgc
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tttatttttc tttctaaaga cg
                                                                      382
     <210> 780
     <211> 437
     <212> DNA
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     <400> 780
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tcctgatgga ggagtgcata taattggagg ggaaattggg gaggctttta ttatttttgc
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aacagatgaa gatgcaagac gtgccataag tcgttcagga gggtttatca aggattcatc
                                                                      240
tgtagagete tttettagta geaaggeaga aatgeagaag aetatagaaa tgaaaagaae
                                                                      300
tgatcgtgta ggaagagggc gtccaggatc tgggacatca ggggttgaca gcctgtctaa
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ttttattgag tctgttaagg aagaagcaag taattctgga tatggctctt caattaatca
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agatgctggg tttcatg
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     <212> DNA
     <213> Homo sapiens
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acateceetg tgggcacage eegegtgetg cagetggeet ttggetgeae tacetteage
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etggtggete accggggtgg etttgeggge gtecagggca cettetgcat ggccgcetgg
                                                                      240
ggettetget tegeegtete tgegetggtg gtggeetgtg agtteacaeg geteeaegge
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tgcctgcggc tctcctgggg caacttcacc gccgccttcg ccatgctggc caccctgcta
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tgcgcgacgg ctgcggtcct gtatccgctg tactttgccc ggcgggagtg tccccccgag
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     <212> DNA
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ataattttta tactcttctg catttgctaa atttcctctc attagcaggt tataccttta
                                                                      180
tgatcagaaa aaaaattaaa cactgcttct aaaaaatact catctccagc acttggagat
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cacctacctc tacattctac ccaactgagc ccaatttagt cttctcaggg ctttgcccaa
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gaacagttca ggaatgcatg cctctgaagg ccttcctgct cttccccttc tggccttggt
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atotoattot cattoctgcc ctcccctacc totocaaccc catcacttgc cagccatcct
                                                                      420
gttcttcctt gttggtcatc agttaatgaa gtgtattagg tgacctgagt acttgtcagt
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acttcccaga ggcaagaaca ttcctcgcag atcaaggtac ctttaagagc caagaagctc
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agatttggag gcgggagagc tgtactgcat cccctcaaat gttagcagtg ccaagaaatg
                                                                      600
agacqctagt ctagggggca ccacaagcag aaaggggctg tttcaaggag tcgtccgccc
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atgggagtet cetettetat tatteacett getecaagga tatettttet tttaegtatg
                                                                      720
aaaattttgt aattgttcaa ctataacacc atg
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     <211> 769
     <212> DNA
     <213> Homo sapiens
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gataagtegg gettttggtg agacagaett teecaaceet etgeecegee ggtgeecatg
                                                                      180
cttetgtgge tgetgetget gateetgaet eetggaagag aacaateagg ggtggeecea
                                                                      240
aaagetgtac ttctcctcga tcctccatgg tccacagcct tcaaaggaga aaaagtggct
                                                                      300
ctcatatgca gcagcatatc acattcccta gcccagggag acacatattg gtatcacgat
                                                                      360
gagaagttgt tgaaaataaa acatgacaag atccaaatta cagagcctgg aaattaccaa
                                                                      420
tgtaagaccc gaggatcctc cctcagtgat gccgtgcatg tggaattttc acctgactgg
                                                                      480
ctgatcctgc aggctttaca tcctgttttt gaaggagaca atgtcattct gagatgtcag
                                                                      540
gggaaagaca acaaaaacac tcatcacaag gtttactaca aggatggaaa acagntttct
                                                                      600
aatagttata atttagagaa gaatacagtg gattcagtct cccgggataa tagcccatat
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```

720

tattgtgctg ggtaaaagag agtttacata cttgggattg gagaacttta aaacccccaa

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ccgtggcagt gaccagaagg ggccggaagg gggtggccgc cggccgggcc ccgccctggg
                                                                   240
geogeeteec egegggttee gttggetgtg geggeagetg aegettgtgg eggeggtgge
                                                                   300
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ggctgtggag cgagcgcttc tggctacccg agaacgtgag ctgggctgat ctggaggggc
                                                                   360
eggeegaegg etaeggttae eeeegeggee ggeacateet eteggtgtte eegetggegg
                                                                   420
eggeatett ettegtgagg etgetetteg agegatttat tgeeaaacce tgtgeactee
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qtattqqcat cqaqqacaqt qqtccttatc aqqcccaacc caatqccatc cttqaaaagg
                                                                   540
tgttcatatc tattaccaag tatcctgata agaaaaggct ggagggcctg tcaaagcagc
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ccccaacqct tactaaattc tgtgaaagca tgtaagtacg caaggaggga gggagggaat
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aaggaagacg gtgggataca actggactga agtttctgtt ttgaacatca cttctgttgt
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gaactggaac actgattccc ttaagtttct tgggcatgtt gccactaagc taggtgtggt
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                                                                   120
gcatggcgct cctgctcctc caggcgctgc ccagcccctt gtcagccagg gctgaacccc
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cgcaggataa ggaagcctgt gtgggtacca acaatcaaag ctacatctgt gacacaggac
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tqtqqaccat catcatcatc ctqaqctqct gctqtqtttq ccaccaccqc cqaqccaaqc
                                                                   360
accgccttca ggcccagcag cggcaacatg aaatcaacct gatcgcttac cgagaagccc
                                                                   420
acaattactc agcgctgcca ttttatttca ggtttttgcc aaactattta ctacctcctt
                                                                   480
atgaggaagt ggtgaaccga cctccaactc ctccccacc atacagtgcc ttccagctac
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<223> n = a,t,c or g

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gtactggtgc acggaggccc tgccgctctc agtgacggcg ctgctgccca tcgtcctctt
                                                                      240
ccccttcatg ggcatcttgc cctccaacaa ggtctgcccc caqtacttcc tcqacaccaa
                                                                      300
cttcctcttc ctcagtgggc tgatcatggc cagcgccatt gaggagtgga acctgcaccg
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gcgaatcgcc ctcaagatcc tgatgcttgt tggagtccag ccggccaggc tcatcctggg
                                                                      420
gatgatggtg accacctcgt tettgtecat gtggetgage aacaccqcct ccactqccat
                                                                      480
gatgettece attgecaatg ccatcetgaa aagtetettt ggecaqaagg aggttegaaa
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ctggtcaatg gaatatgagt ggaaatgatg tgtgcaactt ccgggttctg tccttcctgc
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cgggtggaat gtgaatatga tggcacctgg gacccaaaga caggagccac atcttgagag
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atagatggca gatctgcccc tgtggctttg gatcatttac ctcagtgaac acaacaagca
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ttatccatga aaccataggt tttgtgtgct agttctagtt tttaaaatat gaattaaatt
                                                                      900
aaatacgtat ctgttaaaac ttaaaaaaaa aa
                                                                      932
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ccctgctttt ccccggtctg ccatcaccac cccaccacca tgcaccccct tcctggctac
                                                                      240
tggtcctgtt actgtctact cctgctattc tccttgggag tccaggggtc cctgggggct
                                                                      300
cccagegetg ccccagagea agtecatetg tettacccag gtgagecagg etccatgact
                                                                      360
gtaacttgga ccacatgggt cccaacccgc tctgaagtgc aattcgggtt gcagccgtcg
                                                                     420
gggcccctgc ccctccgcgc ccagggcacc ttcgtcccct ttgtggacgg nggcattctc
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cggcggaage tetacataca ccgagtcacg ette
                                                                      514
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gctctagaga ttatttctct ttattcagaa gcatacagtt gtttgctgat tgcaagaaga
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tgtttctgtg gctgtttctg attttgtcag ccctgatttc ttcgacaaat gcagattctg
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acatatcggt ggaaatttgc aatgtgtgtt cctgcgtgtc agttgagaat gtgctctatg
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	ctaatccaac					180
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	taaaatttca					120
	tactactagg					180
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	gtcgcattct					300
	aacaaaggca					360
	cggctcactg					420
	atgacttaag					480
	atccacattt					540
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cagttaagtc tatggcagag tcagattctt ttatgtgtct aactgttgcg aagtatagac
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gccaccatcc tettetgggc ageggcagca tgggctaaat caggcaagcc ttegggagag
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accattcccc agaaacagag caacctggag atgaactcag aaatcctgga atcctggca
                                                                      420
aattaccaga gtagcacctc ctactccatc aacacagaac tetetettt ttecaaagte
                                                                      480
aatggcaagt tttccactga gttccagagg atgaagaccc tccaagtgaa ggaccaagct
                                                                      540
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                                                                      120
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aattgtagga etecetetag gagttgggca catgtegttg gtgggageee tgteeetgee
                                                                    180
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1020
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tggtgtctat gagataggcg gcctcgttcc cgtctgggtc gtggtggtga tcgcaggcac
                                                                      600
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     <211> 357
     <212> DNA
     <213> Homo sapiens
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                                                                      120
tgggcctggc caacgttgct gactcctata aaatgctcat ccttgtacga ttcctttttt
                                                                      180
tegectactg aegegetggg ettggagtee ettetgggaa etgecageet gtggecaetg
                                                                      240
ctcctgagcc tcacagagct acctgccctc ctgcaaatgt gactgctgac cttctgttcc
                                                                      300
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     <210> 823
     <211> 402
     <212> DNA
     <213> Homo sapiens
     <400> 823
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                                                                      120
acggagactt tgcaaatggg catcaaacac ttctctgggc tctttgtgct gctgtgcatt
                                                                      180
ggatttggtc tgtccatttt gaccaccatt ggtgagcaca tagtatacag gctgctgcta
                                                                      240
ccacgaatca aaaacaaatc caagctgcaa tactggctcc acaccagcca gagattacac
                                                                      300
agagcaataa atacatcatt tatagaggaa aagcagcagc atttcaagac caaacgtgtg
                                                                      360
gaaaagaggt ctaatgtggg accccgtcag cttaccgtat gg
                                                                      402
     <210> 824
     <211> 348
     <212> DNA
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     <220>
     <221> misc feature
     <222> (1)...(348)
     \langle 223 \rangle n = a,t,c or g
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tgaagaaact ctccatcgtt gtctccctgg ggacagggag gnccccacaa gtgcctgtga
                                                                      120
cctgtgtgga tgtgatatct agcagcatca ccggttactt acgttcgtat gtttttqqtq
                                                                      180
tcaattatat gtgttactct cttctttcct attgtagctc tcttcgatct ttacgccact
                                                                      240
etegeteact gtgtgtacge gttttetact gaetetette tgeetgetgt gatgettact
                                                                      300
gcgcttcctc gtagtctctt cttttcgtcg tcgttgattt tatcatcg
                                                                      348
     <210> 825
     <211> 347
     <212> DNA
     <213> Homo sapiens
     <400> 825
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                                                                      120
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tgctgtgggt cctgctgctg aatctgggtc cccgggcggc gggggcccaa ggcctgaccc
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                                                                     240
attgtatete agttegtaet ggteggteee gggaaaetgg atagtetgga geagtegatt
                                                                     300
atgtactcgg catctctttg agttgatgga gtatcgatgt gtggttg
                                                                     347
     <210> 826
     <211> 649
     <212> DNA
     <213> Homo sapiens
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gcaaagtaga tgttactaaa gattttgaag ggatgtgtag tctttcatca cctaccttgc
                                                                     120
agcactcaag tttacaaacc ctcattgggc atgtgggggt tcctgagtcc cctgtgggaa
                                                                     180
gtggtttttt gccatacacc ttgtttcaga gctcagcctc agttagacag ggcaggctcc
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agtttcctca tctaccctc tccccacagc acctctaatt aaccagccct tttcttacca
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ctgagaaatt gaactctact aaataattac agccttgtgc cacataatga cgttttggtt
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aacaggggac cgtgtgtata atggtggtct cataaqaata taataccatq qqtttactat
                                                                     420
acttttctat atttagaaat gtttagattt aagttagata tggttagatt taaaatacgt
                                                                     480
aacacagget ggacceggta getcatgeet ggaateecag caetttggga ageegagttg
                                                                     540
ggtggatcac ctgagggcag gagtttggaa ccaccctggc caacttgggg gaccccattc
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     <210> 827
     <211> 791
     <212> DNA
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tecttacagg aaacattett ggcaaataca geteegagat caggeetgee ttetteetca
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ccatccccta cctgctggtg ccatgctggg ctggcatgaa ggtcttcagc cagcccggg
                                                                     240
cgctaacccg ctgcaccgcc aacatggtgc aagaggaaca aagaaaggga ctcctgcagc
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gtccggctga cctggccctt gtcatatatc tcatccttgc tggcttcttc actctgttcc
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agccatacct gcgggaccct gtggcctacc ctaaqqtqca qatqctgatq tacatqtttt
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atgteetgee tttetgegge etggetgeet atgeteteae etteeetggt tgeteetgge
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ttccagactg ggccttggtg tttgctggag gcatcggcca ggcacagttc tcgcacatgg
                                                                     600
gggettecat geacetgege acaccettea cetacegtgt geetgaggae acetgggget
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gettettegt gtgcaatetg etgtatgege tgggeeecca cetgetggee tacegttgee
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ttcagtggcc cgcattcttc caccagccac caccctccga ccccctagcc ctccacaaga
                                                                     780
agcagcattg a
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     <210> 828
     <211> 348
     <212> DNA
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     <400> 828
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                                                                      180
ttttgtgctt ttgtagtagt taatggtgga attgttattg gcgatcggag tagtcatgaa
geotgtette attitectea actatictae tittiticat tiactetett titticetti
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cctcatctcc tgtctcctag caaaattaag acttttcttt ccttagtttg gaaacgtaga
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attetgtttt ttgtggttac ettagtetet gtgtttttag tttggaat
                                                                      348
     <210> 829
     <211> 638
     <212> DNA
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     <400> 829
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gategeagtg atgetggegg egeteatgte gtegetgace tecatettea acageageag
                                                                      120
caccetette actatggaca tetggaggeg getgegteee egeteeggeg agegggaget
                                                                      180
cctgctggtg ggacggctgg tcatagtggc actcatcggc gtgagtgtgg cctggatccc
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cgtcctgcag gactccaaca gcgggcaact cttcatctac atgcagtcag tgaccagctc
                                                                      300
cctggccca ccagtgactg cagtctttgt cctgggcgtc ttctggcgac gtgccaacga
                                                                      360
gcaggggcc ttctggggcc tgatagcagg gctggtggtg ggggccacga ggctggtcct
                                                                      420
ggaattcctg aacccagccc caccgtgcgg agagccagac acgcggccag ccgtcctggg
                                                                      480
gagcatccac tacctgcact tegetgtege cetetttgca eteagtggtg etgttgtggt
                                                                      540
ggctggaagc ctgctgaccc cacccccaca gagtgtccag attgagaacc ttacctggtg
                                                                      600
gaccctggct caggatgtgc ccttgggaac taaagcag
                                                                      638
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     <211> 428
     <212> DNA
     <213> Homo sapiens
     <220>
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                                                                     120
gtattetece tggeettggg etggaceaac atgetetaet acaccegegg tttecageag
                                                                     180
atgggcatct atgccgtcat gatagagaag atgatcctga gagacctgtg ccgtttcatg
                                                                     240
tttgtctaca tcgtcttctt gttcgggttt tccacagcgg tggtgacgct gattgaagac
                                                                     300
gggaagaatg actccctgcc gtctgagtcc acgtcgcaca ggtggcgggg tttttctnan
                                                                     360
accecetet ntettetaca taaactgtae tecacetgee tggaactgte caactecace
                                                                     420
atngattg
                                                                     428
     <210> 831
     <211> 892
     <212> DNA
     <213> Homo sapiens
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                                                                      120
tcacatgtga gccacaggtg tcattttaaa atttctagta gcaacagaaa cgaggaataa
                                                                     180
acagatggtg tttgagtcac tgaatttttg gaaggacttc aaatgtcaag cattattctc
                                                                     240
catgaacagg gtgatgaggg gtctggccat caccaccacc tgcctcctga gcatgctcca
                                                                     300
ggccatcacc atcagcccta gcatcttgtg gaatcatgct gctgtccagt atgtacacgg
                                                                     360
teattetett gtteaggeat gagaggtgat accagageet tegeaacace ageegeteee
                                                                     420
caagageete eecagagaaa agggeeatge agaceageet gtgtettetg gaaetggaae
                                                                     480
acggactacc cacccctatg ttgaggcagc ttctgacagg ccttactgct tacggtcatc
                                                                     540
ggtcatcagc ccacccgctt gcatctccag ctgcaagtca ctctgggccc agttctcaga
                                                                     600
caaggccaag teggccacac caggggctet etgggggagee tggaggaagg ttgactettt
                                                                     660
agtetgetge ateteageea ggagtteate catettgaag gtetgagggg caeggggata
                                                                     720
caacgggcca actggggccc ttcatagaat acccccaccc tattcttttc cgaacctctc
                                                                     780
tocaaggete tgaagactge eteegacgte tgtetetege geeegegeea eeegtaaace
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actacgacte tteacteatt cetgeaagte tteacteect etacteegat ge
                                                                     892
     <210> 832
     <211> 312
     <212> DNA
     <213> Homo sapiens
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gegatatgac tgccagactt atgcggtctt tgctggctgc acaacttaca tttgtatata
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gggtggcgca tctaatgaac gttgctcaac gcataagggg aaatcgtccc attaagaatg
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agagactact tgcattgctt ggagataatg aaaagatgaa tttgtcagat gtggaactta
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tcccgttgcc tttagaaccc caagtgaaaa ttagaggaat aattccggaa acagctacac
                                                                     300
totttaaaag to
                                                                     312
     <210> 833
     <211> 426
     <212> DNA
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aatgcatatg ataatcatgt ttttgtggct ggaagattaa tttactgtct taacataata
                                                                     120
ttttggtatg tgcgtttgct agattttcta gctgtaaatc aacaggcagg accttatgta
                                                                     180
atgatgattg gaaaaatggt ggccaatatg ttctacattg tagtgattat ggctcttgta
                                                                     240
ttacttagtt ttggtgttcc cagaaaggca atactttatc ctcatgaagc accatcttgg
                                                                     300
actettgeta aagatatagt titteaceea taetggatga tittitggtga agtitatgea
                                                                     360
tacgaaattg atgtgtgtgc aaatgattct gttatccctc aaatctgtgg tccgtcgacg
                                                                     420
cgacca
                                                                     426
     <210> 834
     <211> 445
     <212> DNA
     <213> Homo sapiens
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<400> 834
aagegégeta gtageagete tggeagaage aaeggtgget tegagggatg geggeggetg
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                                                                      120
tgcacaatat tatcgtcaaa gagettattg tcacattett ettgggaatt actgtggtge
                                                                      180
agatgetaat tteagtgaet ggattaaaag gtgtegaage teagaatgge teggaatetg
                                                                      240
aggtgtttgt ggggaagtat gagacceteg tgttttactg geeetegetg etgtgeettg
                                                                     300
cetteetget gggeegette etgeatatgt ttgteaagge tetgagggtg cacetegget
                                                                     360
gggageteca ggtggaagaa aaatetgtee tggaagtgca eeaggqaqag cacgteaaqe
                                                                      420
ageteetgag gataceeege cetea
                                                                      445
     <210> 835
     <211> 487
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     <222> (1) ... (487)
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                                                                      60
cgtgcgggat acaggcctag gctatggtaa ttgtaagcgg aagtgaaata aatattttat
                                                                     120
ttgtgtgtgc atttatttaa caaacattaa ttatctcctt gattaataaa gcactgttcc
                                                                     180
tgccctcaag tagttcatgg tgggctagtc caagaacaat taaatatagt atgactatac
                                                                     240
atttatgtag taatctaatg tgtcatttct tgcagagaat gggaacaatt ctcctttgcc
                                                                     300
caaatatgca acctcaccaa aacctaacaa cagttatatg ttcaaaaggg aacctcctga
                                                                     360
gggctgtgaa agggtcaaag tctttgagga atgctcgtaa gtatcccttc caccatccgc
                                                                     420
ccnnggngga acccccaat ggggggcaaa caaggnnggg gggggcgcgg tttaaacaac
                                                                      480
ccacqan
                                                                      487
     <210> 836
     <211> 611
     <212> DNA
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ctggatgggc cttgaagcct tccacctcta cctgctcgct gtcagggtct tcaacaccta
                                                                     120
cttcgggcac tacttcctga agctgagcct ggtgggctgg ggcctgcccg ccctgatggt
                                                                     180
categgeact gggagtgeca acagetacgg cetetacace atecgtgata gggagaaceg
                                                                     240
cacctetetg gagetatget ggtteegtga agggacaace atgtaegeee tetatateae
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egtecaegge taetteetca teacetteet etttggeatg gtggteetgg eeetggtggt
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ctggaagatc ttcaccctgt cccgtgctac agcggtcaag gagcggggga agaaccggaa
                                                                     420
gaaggtgctc accetgctgg gcctctcqag cetggtgggt gtgacatggg ggttgqccat
                                                                     480
cttcacccg ttgggcctct ccaccgtcta catctttgca cttttcaact ccttgcaagg
                                                                     540
tgtcttcatc tgctgctggt tcaccatcct ttacctccca agtcagagca ccacagtctc
                                                                     600
ctcttctact g
                                                                     611
```

<210> 837 <211> 609

<212> DNA <213> Homo sapiens

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<210> 838 <211> 11795 <212> DNA <213> Homo sapiens

<400> 838

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	ctcccaacac					2100
	ctaaggagcc					2160
	ctccaactac					2220
	ttgcacccac					2280
	cccctaaggg					2340
	ctgctccaac					2400
	ctcccaagaa					2460
	ccacctctga					2520
	agcctgcacc					2580
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	ctgcacctaa				-	2880
	taacagctac					2940
	ttactactct					3000
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	ctaccaaaaa					3180
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	tccaaaccac					3300
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	tcaaaggatt					3780
	agaactggcc					3840
	ataaacagga					3900
	atggagaaac					3960
	caaacacaca					4020
	gtccttcata					4080
	tcagctatat					4140
	aaagatcaat					4200
	tctgggcaga					4260
	agtcaactaa					4320
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	aatatttcct					4500
ctctctgtct	gttaaactga	cgaccacgga	caccttgtct	caatgttgtc	tgaagtctta	4560
	aggctttggt					4620
cctggctggt	ggaggggaga	tctgactcat	cagatgcttg	aaccggctct	tetteetget	4680
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<213> Homo sapiens
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<223> n = a,t,c or g

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cctgctgatg attcttggct taggttctac aattctgaag gagcattatt ctggcattct
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tgtaaacaca catgaaga
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     <223> n = a,t,c or g
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actactetag caaaceteat accetttact etgageetaa tatgttttet getgttaate
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tgttctcttt gtaaacatct caagaagatg cggctccata gcaaaggatc tcaagatccc
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atttactttc tgtgtataat cacatcaact tggaatctta ggacacagca gagcaaactt
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gtactcctgc tttgccaaac tgttgcaatc atgtatcctt cattccactc attcatcctg
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459

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tcttaaaaca tttgaatgga ttttccctct tgttgcccag gctggagtgc aatggtgtga
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teteggttea etgeaacece etgeeteeeg ggtteaageg atteteetge eccageetee
                                                                     300
tgagtagctg ggattagagg catgtgccac catgcccagc taattttgtg tttttagtag
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tgcaattaag aaccettaac ccactteett tttetta
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                                                                    420
agaaatgcag accetgcgtg tggttttggc aaccetgggt gtgggagetg ettetettgg
                                                                    480
cattacctgt tctactgccc aagaaaatga actaattcct tccataatca ggggaagagc
                                                                    540
tactggaatc actggaaact ttgctaatat tgggggagcc ctggcttccc tcgtgatgat
                                                                    600
cctaagcata tattctcgac ccctgccctg gatcatctat ggagtctttg ccatcctctc
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tggccttgtt gtcctcctcc ttccg
                                                                    685
     <210> 849
     <211> 413
     <212> DNA
     <213> Homo sapiens
     <400> 849
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tcgtctacgg ttttgtatac ttcacaacgg gagaaacgat tatggacaag ttactccgtg
                                                                    120
tectetactg gattetegtg aagacettet teagagagat tteggtgteg caccaggage
                                                                    180
gtatccccaa agataagccg gtcatgctgg tgtgtgctcc gcatgccaac cagtttgtgg
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acggaatggt catttcaacc catctggacc gcaaggtgta ctttgtgggt gcggcctcga
                                                                    300
gtttccgcaa gtacaaggtg gtgggtctct tcatgaagct gatggcgtcc atcatttcgg
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gggagcgtca ccaggacgtg aaaaaagtgc tgaccggaat ggcgacggag aag
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```

```
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                                                                      120
gaggcactcc ggcgggcatg cttgatcaga agaaagggaa gtttgcttgg tttagtcact
                                                                      180
ccacagaaac ccatggtaat gttcccctgt gctctgtgtg tgtaaatgcg tgtgggtgca
                                                                      240
taccagactg aatgggaagg tgtctctctt gatggcttgt gccgcagtag ttctgtgtgt
                                                                      300
gtgcatatat gtgtatgtat atatgttgtg tgggtgtgtg tgtttgtgaa gggatggcaa
                                                                      360
cctgtccccc tcaaagccac tgccttatca tggct
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     <210> 851
     <211> 904
     <212> DNA
     <213> Homo sapiens
     <400> 851
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                                                                      120
tccagcatgc ccttatgccc gtcattccca agggctcctc cgtgggtaca ggaaccaact
                                                                      180
tgcacagtga gtctgccagt tttctaacca gcccaaagct catcatgtgc ctaccccttg
                                                                      240
cttagtaaac atgtgccctg cccttcctaa gaacagaatg aagaaagact tcttggggat
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gacttagttt attgtagaat gtagggtgtc taaataaaag ctgctgcaca tactaagatg
                                                                      360
tttagtttgt taaattatcc tattttatta tagctatttt atattaaaat ttaacaaatt
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caggtaaaca ctatgtatta ggcaattaca gacctctaga gctattggtt ataaaagaag
                                                                      480
aagtaatetg geegggetea gtggeteaca cetetaaace cagetettag ggaggeeaaq
                                                                      540
gtaggtggag gacttgagcc aagaggtcta gtccagcctg ggcaacatgg ggaaaccctg
                                                                      600
tetetacaaa aaatacaaaa attageeagg catagtgtca tgegeetgtg gteecageta
                                                                      660
ctctggaggc tgaagcagga aaattgcttg agcttaagaa gcataagttg cagtggggcc
                                                                      720
aagatcaagc ccactggatt tctgccttgg ccaagaaaag aagagggagg agggggaaga
                                                                      780
agggaggagg aaggaaattt aaccagcttt cagctttgaa tgggaatggc ccgagatgaa
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aaagtaacgg cgacaggggc attgacgagg gtccggggat gggcctgcaa cattatggta
                                                                      900
gccc
                                                                      904
     <210> 852
     <211> 592
     <212> DNA
     <213> Homo sapiens
     <400> 852
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tececaatac aacteatgag ggttteaatg teaeceteca caccaccetg gttgteacga
                                                                      120
cgaaactggt gctcccgacc cctggcaagc ccatcctccc cgtgcagaca ggggagcagg
                                                                      180
eccagcaaga ggagcagtec ageggcatga ccattttett cageeteett gteetageta
                                                                      240
tetgeateat attggtgeat ttactgatee gatacagatt acatttettg ecagagagtg
                                                                      300
ttgctgttgt ttctttaggt attctcatgg gagcagttat aaaaattata gagtttaaaa
                                                                      360
```

ttccccctat ttggttccat	ttggaaggaa tatctttgag caccctgttt ttttctgggt	tctggatatt gctgtttttg	cattacacaa gaacggcaat	gggtaacttc ctccgctttt	tttcaaaata gtagtaggtg	420 480 540 592
<210> <211> <212> <213>	436	ns				
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<210> <211> <212> <213>	420	ns _.				
caccaggagc agacttaaga cggcagctgc ggagagaagt aaggacaagg	855 cccagctcgc tcaacaccct atgctggtga aggctgctga tgagctgcac agggggctgc gtattgcgga	caagttccag agagtgcaag ggaagctgtg tagcaaccat cctgcgtgaa	ctgagtgctg agcctcaggg gagaagctga cttgcagagt gaccaagaaa	aaatcatgga gccagcttga aggccaccca gccaggcggc ggacccagaa	ctaccagage ggagcaagge agcagacatg catgctgagg ggaactcgaa	60 120 180 240 300 360 420

<210> 856 <211> 412

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<212> DNA
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     <400> 856
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                                                                      120
cgtggggatg agtgacggaa acccagaget cctgtcaacc agccagacet acaacggcca
                                                                      180
gagogagaac aacgaagact atgagatccc cccgataaca cctcccaacc tcccggagcc
                                                                      240
atcoctcctg cacctggggg accacgaagc cagctaccac tegetgtgcc acggcctcac
                                                                      300
ccccaacggt ctgctccctg cctactccta tcaggccatg gacctcccag ccatcatggt
                                                                      360
gtccaacatg ctagcacagg acagccacct gctgtcgggc cagctgccca cg
                                                                      412
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     <211> 403
     <212> DNA
     <213> Homo sapiens
     <400> 857
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gcccctggct ggtttgggaa ggctgggctc ccaggctggt ggtagtggtg ggggtgattt
                                                                      120
tecteatgaa geececacte egtecactae tgeetgacae ecaegaageg ageagtttee
                                                                      180
ggagetetee gatgtagggg cageaggtgt agageagetg etggteeace acaggegeat
                                                                      240
tgtccaagcc atgctctggg gctactgtgt ccacctcaaa ggcatatgag ggaccctctt
                                                                      300
ccagaaagaa caagtcctca gggactgtgg gaatctggaa aagccagtcc agggcagcaa
                                                                      360
gaagcagcag cttgttcagg aaacacatct tcccctcact ctc
                                                                      403
     <210> 858
     <211> 439
     <212> DNA
     <213> Homo sapiens
     <400> 858
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                                                                       60
geteategge atetecattg geageetgeg egggetggge accaagtgeg etgtgteeaa
                                                                      120
cgacctcacc gagcaggaga tacggaccct ggagcattgt cccaattcct tcttctaatg
                                                                      180
aagaaatacg cttaqttqat qatqcqtttq qaaaaatttq tcacatqqtc aqtqatqqct
                                                                      240
cttgggtggt tcgtgttcag gcagcaaaac tgttgggctc tatggagcaa gtcagttctc
                                                                      300
atttettgga geagaceett gaeaagaage atgteagate tgaggaggaa aegtaetgea
                                                                      360
catgagcgtg ccaaggaact ttacagttcg ggggagtttt ccagtggcag aaagtgggga
                                                                      420
gatgatgctc ccaaggaag
                                                                      439
     <210> 859
     <211> 985
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1) ... (985)
    \langle 223 \rangle n = a,t,c or g
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acctgcacga cgttcatagt tgactccaca gatccgggga gcctggattg tcactggggg
                                                                      120
tetgeacaeg ggeateggee ggeatgttgg tgtggetgta egggaecate agatggeeag
                                                                      180
cactgggggc accaaggtgg tggccatggg tgtggccccc tggggtgtgg tccggaatag
                                                                      240
agacaccete ateaaceeca agggetegtt ceetgegagg taceggtgge geggtgacee
                                                                      300
ggaggacggg gtccagtttc ccctggacta caactactcg gccttcttcc tggtggacga
                                                                      360
eggeacacac ggetgeetgg ggggegagaa cegetteege ttgegeetgg agteetacat
                                                                      420
etcacagcaa aacacggccg tggcagggac tggaattgac atccctggcc tgctcctcct
                                                                      480
gaaagaatgt gatgagaaga tggtgacgcg aatacacaac gccagccagg ctcagctccc
                                                                      540
atgtetteet tatgattgeg ttaaggggga getaeggaet tgeetagegg geacecettg
                                                                      600
gaataccete ttgcccccgg gaacggtggt tttccagcet acgccccgaa ccccgagaat
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gcatccacgc gcctcgtttt gctgaattga ngatccttgg acgtccttgc atcccacatc
                                                                      720
gtggcgaaat tatttatcta ccccccccg ccggtgggag taattgcata cttccatccc
                                                                      780
tattgcctcg ttttggagga gttggtgact ctcacttcta tcggtaatag gacattaccg
                                                                      840
tatccgacct tatgactcgg ttccccgatc aacaatcgac tagtaccggc cgcggccacc
                                                                      900
tacctectta taacaettet ettaceggea ecteegteet tggtagtaaa eteetggege
                                                                      960
tgtatctgtg tgctactgct aggcc
                                                                      985
     <210> 860
     <211> 396
     <212> DNA
     <213> Homo sapiens
     <400> 860
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ctcgaagaga aacatcggga ggcccaagtc tcagcccagc acctagaagt gcacctgaaa
                                                                      120
cagaaagagc agcactatga ggaaaagatt aaagtgttgg acaatcagat aaagaaagac
                                                                      180
ctggctgaca aggagacact ggagaacatg atgcagagac acgaggagga ggcccatgag
                                                                      240
aagggcaaaa ttctcagcga acagaaggcg atgatcaatg ctatggattc caagatcaga
                                                                      300
tccctggaac agaggattgt ggaactgtct gaagccaata aacttgcagc aaatagcagt
                                                                      360
ctttttaccc aaaggaacat gaaggcccaa tgtatt
                                                                      396
     <210> 861
     <211> 686
     <212> DNA
     <213> Homo sapiens
     <400> 861
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                                                                      120
                                                                      180
ccagcaactt tgaaaacatc ctgacgtggg acagcgggcc agagggcacc ccagacacgg
tctacagcat cgagtataag acgtacggag agagggactg ggtggcaaag aagggctgtc
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ageggateae ceggaagtee tgeaacetga eggtggagae gggcaacete aeggagetet
                                                                      300
actatgccag ggtcaccgct gtcagtgcgg gaggccggtc agccaccaag atgactgaca
                                                                      360
ggttcagctc tctgcagcac actaccctca agccacctga tgtgacctgt atctccaaag
                                                                      420
tgagatcgat tcagatgatt gttcatccta cccccacgcc aatccgtgca ggcgatggcc
                                                                      480
accggctaac cctggaagac atcttccatg acctgttcta ccacttagag ctccaggtca
                                                                      540
accgcaccta ccaaatggtg agtgtatgtt gcaccctggt ctttctctgc ctaggaagcc
                                                                      600
tetteeetee caattagate tgagttgett taagaaaaaa aggggacatg ttatgtaaat
                                                                      660
tagcatttcc cacaacatgt cccttg
                                                                      686
```

```
<210> 862
     <211> 383
     <212> DNA
     <213> Homo sapiens
     <400> 862
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cccctggtgg tggagtgtgg cagctgccct gcctgccctg ctgctgtcta tcctcatctt
                                                                      120
catggaccaa cagatcacag cagtcatcct caaccgcatg gaatacagac tgcagaaggg
                                                                      180
agetggette cacetggace tettetgtgt ggetgtgetg atgetactea cateageget
                                                                      240
tggactgcct tggtatgtct cagccactgt catctccctg gctcacatgg acagtcttcg
                                                                      300
gagagagagc agagcctgtg cccccgggga gcgccccaac ttcctgggta tcagggaaca
                                                                      360
gaggctgaca ggcctggtgg tgt
                                                                      383
     <210> 863
     <211> 673
     <212> DNA
     <213> Homo sapiens
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ggagctggac accaaaggtg agcctggcag gggaggagcg tggggagacc tgtcagcccg
                                                                      180
accetttece tecceacet teetgeageg tggggaggae ceceeteae tetteettgg
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gatececece cacaacetta tttettagee eceteetgag ggtagagteg egtggageta
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aatgtgttgt ctgttgctag gagacagtct gtaatttacc aaatgtgccg gtccttggcc
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accgcacccc tagggaccac ccggaggctt ccccaccgct gacacccccg cgggcccct
                                                                      420
etctgagece tggtggettg ggtttagaca gtccccagtg ttgcctgtgt taggggagga
                                                                      480
gacagagttt gtttacttgt gggggactga ggaagtgcca ctaggatgcc ttgaaataca
                                                                      540
tcaagagaag gtctgaaaac tgaaaagaga gtcctctaag gatccagggt gtcccccac
                                                                      600
ctccttgctg acccttcccc tctggaagtg gcagccaatc tggggcccag gaatgttgtt
                                                                      660
tcattgataa ggg
                                                                      673
     <210> 864
     <211> 435
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(435)
     \langle 223 \rangle n = a,t,c or q
     <400> 864
gggaaatgtg tgggagccct gagcgtttgt gtgtgcgctg cgctcgtgtg tgcgctgtgt
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tcatgcgtgc gctgtgtgtt gtgtgtgtat atctgcggag acgcataaag tatgagcgct
                                                                      120
ttttaggatg ggaattgaga tgtaagattt gggggtgagg gccnccctga cccataggcc
                                                                      180
tgacatecte atectatgga cectagagte tggecactee aggaacetga cetgetetgt
                                                                      240
gccccgcccc tgtaagcata gaacaccccc catgatctcc tggagtgggg cctccgagac
                                                                      300
```

360

ctccccgggc cccactactg cccgttcctc agtgctcacc cttaccccaa agccccagga

```
nnaccggncc agccctcacc tgtnaggttg accttgcctg gggacagggt gtgacccacg
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accnatacct ntncq
                                                                      435
     <210> 865
     <211> 2161
     <212> DNA
     <213> Homo sapiens
     <400> 865
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tgatctaatc ccgggagact tgagggacct ccgagtagaa cctgttacaa ctagtgttgc
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aacaggggac tattcaattt tgatgaatgt aagctgggta ctccgggcag atgccagcat
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ccgcttgttg aaggccacca agatttgtgt gacgggcaaa agcaacttcc agtcctacag
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ctgtgtgagg tgcaattaca cagaggcctt ccagactcag accagaccct ctggtgqtaa
                                                                      360
atggacattt tectacateg getteeetgt agagetgaac acagtetatt teattgggge
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ccataatatt cctaatgcaa atatgaatga agatggccct tccatgtctg tgaatttcac
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ctcaccagge tgcctagacc acataatgaa atataaaaaa aagtgtgtca aggccggaag
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cctgtgggat ccgaacatca ctgcttgtaa gaagaatgag gagacagtag aagtgaactt
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cacaaccact cccctgggaa acagatacat ggctcttatc caacacagca ctatcatcgg
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gttttctcag gtgtttgagc cacaccagaa gaaacaaacg cgagcttcag tggtgattcc
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agtgactggg gatagtgaag gtgctacggt gcagctgact ccatattttc ctacttqtqq
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cagegactge atcegacata aaggaacagt tgtgctctge ccacaaacag gegtcecttt
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ccctctggat aacaacaaaa gcaagecggg aggetggetg cctctcctcc tgctgtctct
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gctggtggcc acatgggtgc tggtggcagg gatctatcta atgtggaggc acgaaaggat
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caagaagact teetttteta eeaccacact actgeeecce attaaggtte ttgtggttta
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cccatctgaa atatgtttcc atcacacaat ttgttacttc actgaatttc ttcaaaacca
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tgacgtcaac agtgtgtgcg atggtacctg tggcaagagc gagggcaqtc ccaqtqaqaa
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acttetecat gteaageage aggtgteage aggaaaaaga teacaageet geeacgatgg
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ctgctgctcc ttgtagccca cccatgagaa gcaagagacc ttaaaggctt cctatcccac
                                                                    1560
caattacagg gaaaaaacgt gtgatgatcc tgaagcttac tatgcaqcct acaaacaqcc
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ttagtaatta aaacatttta taccaataaa attttcaaat attqctaact aatqtaqcat
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taactaacga ttggaaacta catttacaac ttcaaagctg ttttatacat aqaaatcaat
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tacagtttta attgaaaact ataaccattt tgataatgca acaataaagc atcttcagcc
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aaacatctag tcttccatag accatgcatt gcagtgtacc cagaactgtt tagctaatat
                                                                    1860
totatgttta attaatgaat actaactcta agaacccctc actgattcac tcaatagcat
                                                                    1920
cttaagtgaa aaaccttcta ttacatgcaa aaaatcattg tttttaagat aacaaaagta
                                                                    1980
gggaataaac aagctgaacc cacttttact ggaccaaatg atctattata tgtgtaacca
                                                                    2040
cttgtatgat ttggtatttg cataagacct tccctctaca aactagattc atatcttgat
                                                                    2100
tcttgtacag gtgcctttta acatgaacaa caaaataccc acaaacttgt ctacttttgc
                                                                    2160
                                                                    2161
    <210> 866
    <211> 505
    <212> DNA
    <213> Homo sapiens
    <220>
```

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<221> misc_feature
     <222> (1) ... (505)
     <223> n = a,t,c or g
     <400> 866
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catgtacatt gcagtcatac tggagaattt tagtgttgcc actgaagaaa gtactgaacc
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tetgagtgag gatgaetttg agatgtteta tgaggtttgg gagaagtttg atecegatge
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gacccagttt atagagttet ctaaactete tgattttgca getgeeetgg atecteetet
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tctcatagca aaacccaaca aagtccagct cattgccatg gatctgccca tggttagtgg
                                                                      360
tgaccggatc cattgtcttg acatcttatt tgcttttaca aagcgtgttt tgggtgagag
                                                                      420
tggggagatg gattetette gttcacagat ggaagaaagg ttcatgtetg caaateette
                                                                      480
caaagtgtcc tatgaaccca tcaca
                                                                      505
     <210> 867
     <211> 608
     <212> DNA
     <213> Homo sapiens
    <400> 867
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                                                                       60
gcagetetga accecaaage ggeteetetg aatteccagt tteaagttee actetgteee
                                                                      120
tgctgggcat ctcgagatat gggaaacagg gctgttataa ttgccagaca gctgagttct
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gtacatacct tgatttgcaa ttttttttgg ctgcttctca ggacaactgg gggagattta
                                                                      240
gatteettaa aatgeagtta tgaatetatt ggeeteaact etatttetae eeatgaatte
                                                                      300
atttgtactt ggcaaagacg acttaatttc tcatttgtta tgtcatttaa acctctcttt
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agageetete eteaetetta eetgttaata ateggaagte agetacatga aaegtteaat
                                                                      420
ttgggttcca tctcctctga agaaaaatgc agttaaaaaa aaaataagag gtttggccag
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ccgcagtggc tcacacctgt aatcccagca ttttgggagg ccgaggcagt cagatcacct
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aagagagaga agaggggccc tctgtggagg cactggcggc gggaaaccta cccatactat
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gacctccagg tgaaggtgct gagggccaca aacatccggg gcacagacct gctgtccaaa
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geogactget atgtgcaact gtggctgccc acggcgtccc caagccctgc ccaqactagg
                                                                      300
atagtggcca actgcagtga ccccgagtgg aatgagacct tccactacca gatccatggt
                                                                      360
getgtgaaga acgteetgga geteaceete tatgacaagg acateetggg eagegaceag
                                                                      420
etetetetge teetgtttga eetgagaage eteaagtgtg geeaacetea caaacace
                                                                      480
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ttcccactca accaccagga ttcacaagag ctgcaggtgg aatttgttct ggagaagagc
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atgaagggta tgattttggg agaggggaga gccccacggc aacagcacgg ccaatcttgg
                                                                      660
gaggggggg tgggaccete ceceetetee cenngnanaa acaeeggagg gaagatagtt
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aaaaccaggt agactggaaa ggatgtgtct acagtaactg aaacacatca ctgcgttttg
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atcagtctgt gccgaagtcn nnnnnnnnc ttttttcttt ttttgcccac attacatcac
                                                                      300
ttcataattt accacctacg tagcatgact gtatatttgg aatcatttct tcacaagttt
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tagaccatat taaaggaaca ctggcagaac cctgtttgat ttccctttcg tctgttcccc
                                                                     420
tacattgccc tcctggcccc cttgaggaac tagatgagcg attagaactg gccagaggtc
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gtgggettea tgtetgagte atatttgeet gettteettt gaggtggtgg gegeeaaggt
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gtttcattct tgaagtaagt gagaccaaga acctgccaat ttcagacaca atggagagcg
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ccagtcctgc tgcggggcca tacatctatt taatttcctc tcatcttccc cccggttccg
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     <212> DNA
     <213> Homo sapiens
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ataagtggcc ttggctacag gatgtactgg ttcacaaact tcctatatga catgctcttt
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tacttggttt ccgtctgcct gtgtgttgcc gttattgtcg ccttccagtt aacaqctttt
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                                                                      300
cttccatgga tgtacctgat gtccagaatc ttttccagtt cggacgtggc tttcatttcc
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ttgctagcca tcatc
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ccctcaactt ctccttcagc cataaatcag acatctggtc cctgggctgc atcattctqq
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acatgaccag ctgctccttc atggatggca cagaagccat gcatctgcgg aagtccctcc
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gecagageee aggeageetg aaggeegtee tgaagacaat ggaggagaag caqateeegg
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taacgataaa gtgagctcag ggtcggggtt tattttaacc tgtggattta tctttcaaca
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tototocaco ctaatacaag cacagotagt tggotttgta acgootcaaa gaactocato
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acagatgccc tgattatccc tgcacagctg ggctttgccc agttctggct ctcccaaacc
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gtgctgcggc gagtaatccc gaatgtacgg tggagtgagc agactgaccc ccaggaggca
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caggaggcgt agccccagg acccacgaca cttttagggt tccagaaaaa aqttttcatt
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caacataaaa aaaaaaaaat tootaaagac aaaaaaaaaa aaa
                                                                      703
    <210> 876
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getggetget ggeactgtge etgggeetgge tgtggaccca cetgacettg getgeeetge
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agecteceae tgecaeagtg ettgtgeage agggeaeetg egaggtgatt geggeteace
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gctgctgcaa ccggaaccgc atcgaggagc gctcccagac ggtgaaatgc tcctgttttt
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etggccaggt ggccggcacc acgcgggcaa agccctcctg cgtggacgac ctgctcttgg
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catcgtcct
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<213> Homo sapiens
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<210> 878 <211> 1139 <212> DNA <213> Homo sapiens

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aatatttgcc cacggcctcc caggcccagg cccatgccac ctgggccccg gcatctgttt
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gaggatetge caatgtgete ttaactgagg acgaaggaag aacacettte tatgagtett
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gcaaagatta cctccttcag gccacaaata tttgagtgca cactacgtgc caggcactgt
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gcagggctgc aggcatagag acagaatgta atctatctgg gccttggacc ccatagggag
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aggggaccac tcaggtccat acttectttg gacttggggc tttggccttg ggaggggcgg
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ctgacactca cgaggcagta tatgcggatg atgggagtgc atccagtgat ccatttcctg
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gcctggttcc tggagaacat ggctgtgttg accataagca gtgctactct ggccatcgtt
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gattttggga tgtcagtcgt catgctgagc tacctcttga gtgcattttt cagccaagct
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aatacagegg ceetttgtac cageetggtg tacatgatea getttetgee etacatagtt
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ctattggttc tacataacca attaagtttt gttaatcaga catttctgtg ccttctttcg
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tttcctttac atcttttgt tgtgtacagc agggcatata cttctcttgt cttggttgga
                                                                     240
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aggatgtctg gttctcgtaa agagtttgat gtgaaacaga ttttgaaaat cagatggagg
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caattgcctt tggcttcaat tggttaccga aggtccagcc aactggattt tcagaattca
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tgtggcggtg cacattggct ggatagacca gaagtggatg atggcactag tgaagaagaa
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acatttaaaa aaatggaaaa ctatttgaga cataaacagt tgtgtgatgt aattttagtc
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gctggcatgt ttactaat
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ttgg
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gtggcttccc agagactact aggagaactt ggtcctatcg ctgccccac ctggaagctg
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getteteaac teagteecac cactetteat egeaaceete tgagtetgea geagaaacaa
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acatetecaa gttacagagg aggggatgga atececaagg ggeegagegg tageeetttt
                                                                      360
aacttataag cctgttgatt agcctatacg agttatttgc acgtcaagaa aggaagtagc
                                                                      420
etgeteette etgeagegte etgetggtgt gacageacgt ecceaagete agtgetaace
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acagagcate etgeatttgt tgeetegggg tgeageecea aagataaage cageagtgtg
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                                                                     1140
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ctcqat
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     <221> misc feature
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gactottoco agtgtoctgo atgtotgoco ocagoaccoa gggotgoctg caagggoago
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ggettagtec agggteceaa tggeactatt gagageeeag ggttteetea egggtateeg
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aactaatagc cctcttatgt ggtaaagagt tcatttttaa tgcagaagag tttcattaaa
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                                                                   1320
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agataccago ttogtataaa coatttoaaa gatgtoottt caggtgtoac gggaagtoto
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```
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cctttaagct gatcctaagg aagttatttt ttgtatacct tcagagaggg gataacatcc
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caaagatatt agtgttcaca gaggatggat atttcctacg agcctggaat tatacagttg
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aaaatgggac agggcctgct aagttcaaca tacctcacag tgttacactt gattcagctg
                                                                    840
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                                                                    300
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gcctgccagc ggttcctgga ctaagtccgg ctcgttcaag aacataagct accaccttct
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1260
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gecaccetee egectgtegg eeegtagatt tateaagggt gttatgggee eagetttggg
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                                                                     1500
gggccagtcc cgatgcactt tgaggggtgt tggagagggg actccccac tcgcacttaa
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qqaqtctqqc agctqcccac agagggccqa gggtcacccq tcggccgccq ccaccccagg
                                                                     1740
cgaggccgga ggaaggatca tctgagacgc aggaggcatc tgctggagca gcaatttccc
                                                                     1800
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gacttgtctt cggtagggac agtcaagtca ggcaaaaccg tgaacttggc tacagcaggc
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                                                                      240
acaatcaagc cgggcacagc catgaatctg actacagttg ggacaaccaa gccagggatg
gtcatggatt tgatagcctc agaaccagac aagctgggca aagccatggc tacaagaagc
                                                                      300
                                                                      360
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ccatcctggc catctatgcc ggcgtcatca agtctgcctt cgaccccccg gacatcccgg
                                                                      180
                                                                      240
tetgeeteet ggggaacege acgetgteac ggcgcagett cgatgeetge gtcaaggeet
acggcateca caacaactca gccacetecg cgctctgggg cctcttctgc aacggctccc
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                                                                      360
ageccagege egectgtgae gagtaettea tecagaacaa egteacegaa atteagggea
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                                                                      180
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cgatatgaac cggatggagc tgctgaaact gctgctgaca tgcttctccg aggccatgta
                                                                      240
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cctgcccca gctccggaaa gtggcagcac caacccatgg gttcagttct tttgttccac
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agctggacaa gatgctggac ccccaggtgt ggcgggaggc agctacccag gtcttctctg
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ccttgggcct gggctttggt ggtgtcattg ccttctccag ctacaataag caggacaaca
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ccctcgtggt gtttgctgtg ctgggcttca aggccaacat catgaatgag aagtgtgtgg
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tetattteta catgtggaag ttegtgtete etetatgeat ggetgtgete accaeageea
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gcatcatcca gctgggggtc acgccccgg gctacagcgc ctggatcaag gaggaggctg
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cegagegeta cetgtatttc cecaactggg ccatggcace cetgatcace ctcategteg
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tcagcttgag agacctgata gagatgatgt ctatcggcac gctcctggcc tacaccttgg
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tetetgtetg tgtettgete ettegacace accetgagag tgacattgat ggttttgtea
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caaatgggcc aaagatgggc ctcctgatga tgattctagg ccaaatattc ctgaatggca
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accaagccaa ggaggctgag atttgggaaa tgctctggag gatgggggtg cagcgggaaa
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ggaggettte cattititggg aacccaaaga gacticitgte tgtggagtti gtatggeage
gttacttaga ctacaggcca gtaactgact gtaaaccagt ggagtatgag tttttctggg
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gcccaagatc ccacctagaa accaccaaga tgaaaattct gaagttcatg gcgaa
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tgttcatcaa gaaacccttt atcaagttta tctgccacac agcatcctat ttgaccttcc
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tetetatget teteetgget teteageaca ttgteaggae agacetteat gtacagggge
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cctqtatt
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     <213> Homo sapiens
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     <221> misc feature
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aaaggtatac ggaaactgga cttttggaac cattgttttt acagtcttag tattcactgt
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aaccetgaag ettgeettgg ataccegatt etggaegtgg ataaateact ttgtgatttg
                                                                      360
gggttettta geettetatg tatttttete attettetgg ggaggaatta tttggeettt
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tctcaagcaa cagagaatgg cgaa
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agcotttcaa ggtgaacaga atgatttcaa ctccagccaa ggtgggaaag acttttgcca
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ccaacatggg ctgtttgagc accaaaaaac ccataatggg gagaggcctt atgagttcag
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acatcaggag tgtatt
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     <221> misc feature
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     <223> n = a,t,c or g
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                                                                   120
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tttatttaga tcttttcaa ttcctcatca ctgttttgca gggttttttg tttgtttttg
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ctacaggcgc ccgccaccac gtccagctaa tttttgtatt tttattagag atggggtttt
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gecatgitigg coaggetigt cicgaactee tgaacteagg tgatecacce accteggeet
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cccaaagtgc tgggattaga ggtgtgaacc actgtgcccc gcccattaat tcacttttga
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                                                                      720
ataaaaaaat ggtggtgaag cagatttggc ctcccaattg tttcctcagc cctgacctan
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     <211> 687
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     <221> misc feature
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gtottotoot ttagggatoo caattacaca tagcacgccc tttggagatg gcctacaget
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     <210> 916
     <211> 758
     <212> DNA
     <213> Homo sapiens
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     <221> misc_feature
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<213> Homo sapiens

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aaaaaaaa
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<211> 1327
<212> DNA
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<213> Homo sapiens

<220>

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taccggcagg taactcggct ggcacgtcct gcagccctag gccagtgcag cttagcaggt
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                                                                     360
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aaccogggag gtggaggttg cagtgagccg agatcgtgcc atcgcactcc agcctgggca
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<400> 924

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

1620

1680

1740

1758

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	tccacagcca					300
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	atattttaag					480
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	cgaggtggga					600
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	cagcttggtt					720
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1510

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<213> Homo sapiens

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acactetegt gggttttggt agtagagetg gaagteaaag ccaagteagt etttttattg
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ccgtggccag cttactcagg ggctcgcgac agttgctttc cagctggggc cttgctgggg
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2040

2100

2127

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<213> Homo sapiens

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     <221> misc feature
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                                      561
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gctactgaag ccagacgagg tgacgagact gtacacggac gactacgtgt tcgcgtgggg
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atccaggaga tcggcgtgct aggccaccga ggataagagg atggtggcac aagcagcaca
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cggcagcgca gccggtgcgt actcggccac acccagtccc tccgccagcg ccacccaggc
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ggcaaaggcc aggatcacca ggaggcctga gaagtaggtc atgttcctcc caatqcactt
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gttgatgggc ttcatgagga aggaggacaa gaagccgctg aggtacatca ccaqqggaat
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ggtcgcgatg aa
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<400> 950

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gctctttggt taaatcatgt attcaggcgg gcgtggtggc tcttgcctgt aatcctagca
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                                                                     600
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                                                                     900
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<213> Homo sapiens

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cogtities toccatgest eccacette titetigast teccatetig etcectitet
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                                                                    1020
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                                                                    1080
acagcateca caeggetgee aggagacaeg tttecaattg cagattette cagaaacatg
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<212> DNA <213> Homo sapiens

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<210> 957 <211> 2874 <212> DNA <213> Homo sapiens

<400> 957

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<213> Homo sapiens

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<210> 959

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<210> 1016 <211> 68 <212> PRT <213> Homo sapiens

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<210> 1021 <211> 136 <212> PRT <213> Homo sapiens

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<210> 1022 <211> 186 <212> PRT <213> Homo sapiens

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<210> 1023 <211> 186 .<212> PRT <213> Homo sapiens

(213) Homo Bapiens

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<210> 1030 <211> 50 <212> PRT <213> Homo sapiens

<210> 1031 <211> 152 <212> PRT <213> Homo sapiens

<400> 1031 Met Ile Val Tyr Trp Val Leu Met Ser Asn Phe Leu Phe Asn Thr Gly 10 Lys Phe Ile Phe Asn Phe Ile His His Ile Asn Asp Thr Asp Thr Ile Leu Ser Thr Asn Asn Ser Asn Pro Val Ile Cys Pro Ser Ala Gly Ser 35 40 Gly Gly His Pro Asp Asn Ser Ser Met Ile Phe Tyr Ala Asn Asp Thr 55 Gly Ala Gln Gln Phe Glu Lys Trp Trp Asp Lys Ser Arg Thr Val Pro 75 70 Phe Tyr Leu Val Gly Leu Leu Leu Pro Leu Leu Asn Phe Lys Ser Pro 90 Ser Phe Phe Ser Lys Phe Asn Ile Leu Gly Ile Asn Asn Gln Val Ile 105 100 Leu Pro Gly Val Thr Glu Met Pro Gly Tyr Cys Pro Phe Leu Leu Pro 120 . 125 Val Ser Thr Glu Cys Cys Ala Val Ala Thr Ser Tyr Thr Cys Phe Glu 135 Glu Lys Asn Ile Gly Gln Cys Cys 150

<210> 1032 <211> 1764 <212> PRT <213> Homo sapiens

65					70					75					80
65 Leu	Thr	Glu	Met	Pro 85		His	Ser	Glu	Glu 90	75 Glu	Glu	Glu	Trp	Met 95	
Gln	Ile	Leu	Gln 100	Ile	Leu	Thr	Val	Gln 105	Ala	Gln	Leu	Arg	Ala 110	Ser	Pro
		115	Pro	_			120			_		125			
	130		Met			135					140				
145	_		Gln		150					155					160
			Gly	165		-			170					175	
			Leu 180					185					190		
		195	Arg				200					205			
-	210	-	Glu	-		215					220	_		_	
225	-		Asp Met	_	230					235					240
_			Val	245					250	_		-		255	
			260 Ser					265					270		
		275	Arg				280					285			
	290	-	Leu			295					300				
305			Glu		310					315					320
		_	Leu	325	-	_			330					335	
		_	340 Ala					345					350		
		355	Ala			_	360			_		365			
	370		Leu			375		_			380	_	_		
385			тут		390					395	-				400
			Lys	405					410					415	
			420 Leu					425					430		
		435	Ala				440					445			
	450		Gly			455					460				
465		_	Ala		470					475					480
_	-	_	Leu	485	•				490					495	
	-	-	500 Asp					505					510		
		515	Phe				520	_				525	_		
OL y	530	ست د	- 110			535		Luu	-10		540	u	1	-, ~	u

Phe 545	Glu	Pro	Tyr	Val	Val 550	His	Val	Leu	Pro	His 555	Leu	Leu	Leu	Cys	Phe 560
Gly	Asp	Gly	Asn	Gln 565	Tyr	Val	Arg	Glu	Ala 570	Ala	Asp	Asp	Сув	Ala 575	Lys
Ala	Val	Met	Ser 580		Leu	Ser	Ala	His 585	Gly	Val	Lys	Leu	Val 590	Leu	Pro
Ser	Leu	Leu 595	Ala	Ala	Leu	Glu	Glu 600		Ser	Trp	Arg	Thr 605	Lys	Ala	Gly
Ser	Val 610	Glu	Leu	Leu	Gly	Ala 615	Met	Ala	Tyr	Cys	Ala 620	Pro	Lys	Gln	Leu
Ser 625	Ser	Cys	Leu	Pro	Asn 630	Ile	Val	Pro	Lys	Leu 635	Thr	Glu	Val	Leu	Thr 640
Asp	Ser	Hìs	Val	Lys 645	Val	Gln	Lys	Ala	Gly 650	Gln	Gln	Ala	Leu	Arg 655	Gln
Ile	Gly	Ser	Val 660	Ile	Arg	Asn	Pro	Glu 665	Ile	Leu	Ala	Ile	Ala 670	Pro	Val
Leu	Leu	Asp 675	Ala	Leu	Thr	Asp	Pro 680	Ser	Arg	Lys	Thr	Gln 685	Lys	Сув	Leu
	690			_	Thr	695					700				
705					Pro 710					715					720
	_			725	Met				730					735	
			740		Asp			745					750		
-		755			Leu		760					765			
	770	_			Gly	775					780				
785		_			Pro 790					795					800
				805	Ser				810					815	
	_		820		Glu	_		825					830		
		835		_	Val	_	840					845			
	850				Tyr	855					860				
865	_		_		Ile 870			_		875					880
				885		_			890					895	
			900		Glu			905					910		
		915			Asp		920					925			
	930				Leu	935					940				
Met 945	Thr	Thr	Glu	Thr	Ala 950	Ser	Glu	Asp	Asp	Asn 955	Phe	Gly	Thr	Ala	Gln 960
		_		965	Ile				970					975	
			980		Tyr			985					990		
Arg	Gln	Ala 995	Ser	Leu	His		Trp L000	Lys	Ile	Val		Ser L005	Asn	Thr	Pro
Arg	Thr	Leu	Arg	Glu	Ile	Leu	Pro	Thr	Leu	Phe	Gly	Leu	Leu	Leu	Gly

	1010					1015					1020				
		Ala	Ser			Ala		Lys			Ile	Ala	Ala		Thr 1040
	Gly	Asp	Leu				Leu					Leu			Ile
Ile	Pro		Leu 1060	Glu	Glu	Gly		Arg 1065		Gln	Lys		Asp 1070		Arg
Gln		Val 1075	Суз	Ile	Gly		Ser 1080	Glu	Ile	Met		Ser 1085	Thr	Ser	Arg
:	1090		Leu		:	1095					1100				
1105			Asp	:	1110					1115					1120
				1125					1130					1135	
		:	Leu 1140				;	1145				;	1150		
	:	1155					1160				;	1165			
:	1170	_	Leu			1175					1180				
Val 1185	Leu	ALA	Phe		ser 1190	ser	Val	АДа		ASD 1195	Ала	ren	inr		H15
Leu	Gly	Val				Ala	Val				Leu	Lys			Leu
Gly	Thr		Asp 1220	Glu	Gln	Leu		Met 1225		Asn	СЛв		Ala 1230	Val	Ile
		1235	Glu	_	_	;	1240				:	1245			
:	1250		Thr		:	1255				:	1260				
Ile 1265	Ile	Leu	Asn		Tyr 1270	Cys	Ser	Arg		Lys 1275	Ala	Asp	Tyr		Ser 1280
	Leu	Arg	Ser			Ser	Glÿ	Leu			Leu	Phe	Asn		
				L285					1290				1	L295	
		1	L300				3	L305				1	L310		
•	:	L315	Asp			:	1320				1	1325			
1	L330		Arg Leu			L335				:	L340				
		_		_		_	-								
Arg	Glu	Gly	Val	Leu .365	Thr	Gly	Ser		Glu 1370	Gln	Lys	Glu		Ala 1375	Ala
-		3	Gly 1380				1	.385				1	.390		
	1	L395	Val			:	1400				1	.405			
_1	410		Trp		3	415				3	L420				
Leu 1425	Leu	Ala	Lys		Gly L430	Ile	Ala	Leu		Pro L435	Phe	Leu	Pro		Leu 1440
	Thr	Thr	Phe			Ala	Leu				Asn	Arg			
Leu	Lys		Ala L460		Ala	Leu	-			Ile	Ser				Lys
Val			Leu	Phe	Thr				Asn	Gly				Met	Glu

Asp Pro Gly Val Arg Asp Thr Met Leu Gln Ala Leu Arg Phe Val Ile 1495 1500 Gln Gly Ala Gly Ala Lys Val Asp Ala Val Ile Arg Lys Asn Ile Val 1510 1515 Ser Leu Leu Ser Met Leu Gly His Asp Glu Asp Asn Thr Arg Ile 1530 1535 1525 Ser Ser Ala Gly Cys Leu Gly Glu Leu Cys Ala Phe Leu Thr Glu Glu 1540 1545 1550 Glu Leu Ser Ala Val Leu Gln Gln Cys Leu Leu Ala Asp Val Ser Gly 1560 1565 Ile Asp Trp Met Val Arg His Gly Arg Ser Leu Ala Leu Ser Val Ala 1575 1580 Val Asn Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp 1590 1595 Val Gln Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile 1605 1610 1615 Ala Val Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile 1620 1625 1630 Glu Thr Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val 1635 1640 1645 Lys Cys Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys 1650 1655 1660 Met Ile Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln 1670 1675 1680 Ala Ile Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys 1685 1690 1695 Asn Thr Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu 1700 1705 1710 Lys Met Arg Gln Gly Glu Glu Val Phe Gln Ser Leu Ser Lys Ile Leu 1715 1720 1725 Asp Val Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Arg Ser Leu 1730 1735 1740 Lys Lys Leu Ala Ser Gln Ala Asp Ser Thr Glu Gln Val Asp Asp Thr 1745 1755 Ile Leu Thr * 1763

<210> 1033 <211> 151 <212> PRT <213> Homo sapiens

<400> 1033

 Met
 Asn
 Arg
 Ala
 Ser
 Gln
 Met
 Leu
 Leu
 Met
 Leu
 Met
 Phe
 Leu
 Met
 Leu
 Ala
 Ile
 Ile
 Ile
 Phe
 Val
 Pro
 Gln
 Glu
 Met
 Gln
 Met
 Leu
 Arg
 Arg
 Ala
 Thr
 Leu
 Gly
 Leu
 Gly
 Ala
 Ser
 Ala
 Leu
 Ala
 Asn
 Thr

 Leu
 Ala
 Phe
 Ala
 Asn
 Glu
 Val
 Ile
 Pro
 Thr
 Ile
 Ala
 Asn
 Thr

 Leu
 Ala
 Phe
 Ala
 Asn
 Glu
 Val
 Ile
 Pro
 Thr
 Ile
 Ile
 Arg
 Ala

 Leu
 Ala
 Phe
 Ala
 Asn
 Ala
 Thr
 Phe
 Ala
 Asn
 Ile
 Ile
 Ala
 Ile
 Ala
 Ile
 Ala
 Ile
 Ala
 Ile
 Ala
 Ile

Leu Pro Glu Thr Arg Asn Lys Pro Leu Phe Asp Thr Ile Gln Asp Glu
115 120 125

Lys Asn Glu Arg Lys Asp Pro Arg Glu Pro Lys Gln Glu Asp Pro Arg
130 135 140

Val Glu Val Thr Gln Phe *

150 150

<210> 1034 <211> 149 <212> PRT <213> Homo sapiens

<400> 1034 Met Ala Leu Leu Pro Arg Trp Phe Arg Glu Ala Pro Val Leu Phe 10 Ser Thr Gly Trp Ser Pro Leu Asp Val Leu Leu His Ser Leu Leu Thr Gln Pro Ile Phe Leu Ala Gly Leu Ser Gly Phe Leu Leu Glu Asn Thr 40 Ile Pro Gly Thr Gln Leu Glu Arg Gly Leu Gly Gln Gly Leu Pro Ser 55 Pro Phe Thr Ala Gln Glu Ala Arg Met Pro Gln Lys Pro Arg Glu Lys 70 75 Ala Ala Gln Val Tyr Arg Leu Pro Phe Pro Ile Gln Asn Leu Cys Pro 85 90 Cys Ile Pro Gln Pro Leu His Cys Leu Cys Pro Leu Pro Glu Asp Pro 105 110 Gly Asp Glu Glu Gly Gly Ser Ser Glu Pro Glu Glu Met Ala Asp Leu 120 Leu.Pro Gly Ser Gly Glu Pro Cys Pro Glu Ser Thr Arg Glu Gly Val Arg Ser Gln Lys * 145 148

<210> 1035 <211> 88 <212> PRT <213> Homo sapiens

<210> 1036 <211> 96 <212> PRT <213> Homo sapiens

<400> 1036 Met Val Val Leu Ile Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg 5 10 Asp Phe Tyr Asn Ser Ile Val Asn Val Ala Gln Lys Arg Glu Leu Gly 25 Glu Ala Leu Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly 40 Gly Ala Leu Phe Cys Cys Val Phe Cys Cys Asn Glu Lys Ser Ser Ser 60 55 Tyr Arg Tyr Ser Ile Pro Ser His Arg Thr Thr Gln Lys Ser Tyr His 70 Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser Arg Ser Gln Tyr Val * 90 85

<210> 1037 <211> 139 <212> PRT <213> Homo sapiens

<400> 1037 Met Ala Leu Ser Trp Met Thr Ile Val Val Pro Leu Leu Thr Phe Glu 1 5 10 Ile Leu Leu Val His Lys Leu Asp Gly His Asn Ala Phe Ser Cys Ile 25 Pro Ile Phe Val Pro Leu Trp Leu Ser Leu Ile Thr Leu Met Ala Thr 40 Thr Phe Gly Gln Lys Gly Gly Asn His Trp Trp Phe Gly Ile Arg Lys 60 55 Asp Phe Cys Gln Phe Leu Leu Glu Ile Phe Pro Phe Leu Arg Glu Tyr 75 70 Gly Asn Ile Ser Tyr Asp Leu His His Glu Asp Asn Glu Glu Thr Glu 85 90 Glu Thr Pro Val Pro Glu Pro Pro Lys Ile Ala Pro Met Phe Arg Lys 105 110 100 Lys Ala Arg Val Val Ile Thr Gln Ser Pro Gly Lys Tyr Val Leu Pro 115 120 Pro Pro Lys Leu Asn Ile Glu Met Pro Asp * 135 138

<210> 1038 <211> 64 <212> PRT <213> Homo sapiens

<210> 1039 <211> 286 <212> PRT <213> Homo sapiens

<400> 1039 Met Met Leu Gly Pro Val Thr Leu His Leu Val Gly His Leu Leu Ala Phe Leu Asp Leu Leu Cys Pro Arg Gly Pro Ile His Ser Ile Leu Pro 20 25 Met Thr Phe Glu Ala Val Lys Gln Asp His Gly Phe Met Leu Tyr Arg 35 40 Thr Tyr Met Thr His Thr Ile Phe Glu Pro Thr Pro Phe Trp Val Pro 55 Asn Asn Gly Val His Asp Arg Ala Tyr Val Met Val Asp Gly Val Phe 70 - 75 Gln Gly Val Val Glu Arg Asn Met Arg Asp Lys Leu Phe Leu Thr Gly 85 90 Lys Leu Gly Ser Lys Leu Asp Ile Leu Val Glu Asn Met Gly Arg Leu 105 Ser Phe Gly Ser Asn Ser Ser Asp Phe Lys Gly Leu Leu Lys Pro Pro 120 Ile Leu Gly Gln Thr Ile Leu Thr Gln Trp Met Met Phe Pro Leu Lys 135 140 Ile Asp Asn Leu Val Lys Trp Trp Phe Pro Leu Gln Leu Pro Lys Trp 150 155 Pro Tyr Pro Gln Ala Pro Ser Gly Pro Thr Phe Tyr Ser Lys Thr Phe 170 Pro Ile Leu Gly Ser Val Gly Asp Thr Phe Leu Tyr Leu Pro Gly Trp 185 Thr Lys Gly Gln Val Trp Ile Asn Gly Phe Asn Leu Gly Arg Tyr Trp 200 205 Thr Lys Gln Gly Pro Gln Gln Thr Leu Tyr Val Pro Arg Phe Leu Leu 215 220 Phe Pro Arg Gly Ala Leu Asn Lys Ile Thr Leu Leu Glu Leu Glu Asp 230 235 Val Pro Leu Gln Pro Gln Val Gln Phe Leu Asp Lys Pro Ile Leu Asn 250 Ser Thr Ser Thr Leu His Arg Thr His Ile Asn Ser Leu Ser Ala Asp 260 265 270 Thr Leu Ser Ala Ser Glu Pro Met Glu Leu Ser Gly His * 280

<210> 1040

<211> 96 <212> PRT <213> Homo sapiens

<400> 1040 Met His Ala His Ser Ala Ser Leu Trp Val Ala Phe Phe Tyr Arg Ser 5 10 Pro Phe Leu Phe Phe Thr Thr Gly Pro Pro Pro Pro Thr Ser Ser Ser 20 25 Pro Ala Gly Leu Pro Leu Leu Glu Ser Thr Val Asp Ala Ser Arg Pro 35 40 45 Asn Trp Leu Pro Leu Leu Ser Pro Pro Leu Pro Phe Leu Ser Ile 55 Glu Cys Thr Leu Tyr Asn Phe Ser Gly Ile Val Ile Glu Asn Lys Ile 75 70 Phe Thr Ile Ile Thr Gly Phe Phe Gln Val Thr Ser Cys Arg Leu * 90

<210> 1041 <211> 64 <212> PRT <213> Homo sapiens

<210> 1042 <211> 415 <212> PRT <213> Homo sapiens

<400> 1042 Met Asn Glu Thr Gly Val Ile Val Trp Tyr Leu Ala Leu Cys Leu Leu 10 Leu Ala Trp Leu Ile Val Gly Ala Ala Leu Phe Lys Gly Ile Lys Ser 25 Ser Gly Lys Val Val Tyr Phe Thr Ala Leu Phe Pro Tyr Val Val Leu 40 35 Leu Ile Leu Leu Val Arg Gly Ala Thr Leu Glu Gly Ala Ser Lys Gly 55 Ile Ser Tyr Tyr Ile Gly Ala Gln Ser Asn Phe Thr Lys Leu Lys Glu 75 Ala Glu Val Trp Lys Asp Ala Ala Thr Gln Ile Phe Tyr Ser Leu Ser 90 85 Val Ala Trp Gly Gly Leu Val Ala Leu Ser Ser Tyr Asn Lys Phe Lys

```
100
                        105
Asn Asn Cys Phe Ser Asp Ala Ile Val Val Cys Leu Thr Asn Cys Leu
 115 120
                            125
Thr Ser Val Phe Ala Gly Phe Ala Ile Phe Ser Ile Leu Gly His Met
 130 135
                        140
Ala His Ile Ser Gly Lys Glu Val Ser Gln Val Val Lys Ser Gly Phe
              150
                             155 160
Asp Leu Ala Phe Ile Ala Tyr Pro Glu Ala Leu Ala Gln Leu Pro Gly
    165 170 175
Gly Pro Phe Trp Ser Ile Leu Phe Phe Phe Met Leu Leu Thr Leu Gly
    180 185
Leu Asp Ser Gln Phe Ala Ser Ile Glu Thr Ile Thr Thr Thr Ile Gln
 195 200
Asp Leu Phe Pro Lys Val Met Lys Lys Met Arg Val Pro Ile Thr Leu
                215
                       220
Gly Cys Cys Leu Val Leu Phe Leu Leu Gly Leu Val Cys Val Thr Gln
               230
                         235
Ala Gly Ile Tyr Trp Val His Leu Ile Asp His Phe Cys Ala Gly Trp
           245
                          250
Gly Ile Leu Ile Ala Ala Ile Leu Glu Leu Val Gly Ile Ile Trp Ile
    . 260 265
Tyr Gly Gly Asn Arg Phe Ile Glu Asp Thr Glu Met Met Ile Gly Ala
    275 280
                            285
Lys Arg Trp Ile Phe Trp Leu Trp Trp Arg Ala Cys Trp Phe Val Ile
  290 295
Thr Pro Ile Leu Leu Ile Ala Ile Phe Ile Trp Ser Leu Val Gln Phe
305 310 315 320
His Arg Pro Asn Tyr Gly Ala Ile Pro Tyr Pro Asp Trp Gly Val Ala
      325 330 335
Leu Gly Trp Cys Met Ile Val Phe Cys Ile Ile Trp Ile Pro Ile Met
                       345
Ala Ile Ile Lys Ile Ile Gln Ala Lys Gly Asn Ile Phe Gln Arg Leu
     355 360
Ile Ser Cys Cys Arg Pro Ala Ser Asn Trp Gly Pro Tyr Leu Glu Gln
  370 375 380
His Arg Gly Glu Arg Tyr Lys Asp Met Val Asp Pro Lys Lys Glu Ala
       390 395
.Asp His Glu Ile Pro Thr Val Ser Gly Ser Arg Lys Pro Glu *
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<210> 1043 <211> 48 <212> PRT <213> Homo sapiens

<400> 1043

Met Pro Thr Leu Gly Asp Ala Leu Ile Leu Tyr Leu His Leu Val Leu 1 5 10 15

Gly Val Ala Gly Val Leu Gln Pro Pro Gly Pro Arg Pro Ser Gln Ala 20 25 30

Leu Gly Pro Thr Gly Asp Arg Ala Pro Gly Lys Trp Asn Arg Ser * 35 40 45 47

<210> 1044

<211> 146 <212> PRT <213> Homo sapiens

<400> 1044 Met Leu Phe Ser Ser Met Thr Leu Arg Leu Ser Arg Cys Ser Cys Ser 5 10 Ile Leu Leu Phe Trp Ala Ser Ala Ala Cys Met Phe Pro Ser Ser Arg 20 25 Tyr Leu Trp Ser Gly Arg Ser Leu Val Ser Val Glu Gly Ser Asp Arg 40 35 Phe Ser Ser Ala Val Ser Ser Phe Ser Ser Lys Ala Asn Trp Val Lys 55 60 Pro Lys Phe Arg Ser Trp Ser Gly Gly Ile Glu Leu Gly Phe Gln Met 70 75 His Trp Pro Pro Gly Val Gly Pro Arg Tyr Ser Pro Ser Cys His Phe 90 85 Pro Lys Ser Arg Trp Arg Thr Arg Pro Leu Arg Leu Ser Thr Ala Pro 100 105 110 Cys Thr Ser Trp Thr Leu Glu Leu Gln Tyr Leu Ala Leu Gln Lys Val 120 125 115 Ile Leu Gln Trp Gln Glu Leu Ser Cys Val Phe Arg Met Ser Thr Ser 135 140 Pro * 145

<210> 1045 <211> 53 <212> PRT <213> Homo sapiens

<210> 1046 <211> 407 <212> PRT <213> Homo sapiens

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40
Ser Arg His Ala Ala Glu Leu Arg Asp Phe Lys Asn Lys Met Leu Pro
Leu Leu Glu Val Ala Glu Lys Glu Arg Glu Ala Leu Arg Thr Glu Ala
                  70
                                     75
Asp Thr Ile Ser Gly Arg Val Asp Arg Leu Glu Arg Glu Val Asp Tyr
              85
                                90
Leu Glu Thr Gln Asn Pro Ala Leu Pro Cys Val Glu Phe Asp Glu Lys
                            105
          100
Val Thr Gly Gly Pro Gly Thr Lys Gly Lys Gly Arg Arg Asn Glu Lys
                        120
Tyr Asp Met Val Thr Asp Cys Gly Tyr Thr Ile Ser Gln Val Arg Ser
                   135
Met Lys Ile Leu Lys Arg Phe Gly Gly Pro Ala Gly Leu Trp Thr Lys
                 150
                          155
Asp Pro Leu Gly Gln Thr Glu Lys Ile Tyr Val Leu Asp Gly Thr Gln
                               170
             165
Asn Asp Thr Ala Phe Val Phe Pro Arg Leu Arg Asp Phe Thr Leu Ala
                            185
Met Ala Ala Arg Lys Ala Ser Arg Val Arg Val Pro Phe Pro Trp Val
                         200
                                           205
Gly Thr Gly Gln Leu Val Tyr Gly Gly Phe Leu Tyr Phe Ala Arg Arg
                     215
                                220
Pro Pro Gly Arg Pro Gly Gly Gly Glu Met Glu Asn Thr Leu Gln
                                235
                 230
Leu Ile Lys Phe His Leu Ala Asn Arg Thr Val Val Asp Ser Ser Val
             245
                              250
Phe Pro Ala Glu Gly Leu Ile Pro Pro Tyr Gly Leu Thr Ala Asp Thr
                            265
Tyr Ile Asp Leu Ala Ala Asp Glu Glu Gly Leu Trp Ala Val Tyr Ala
                        280
Thr Arg Glu Asp Asp Arg His Leu Cys Leu Ala Lys Leu Asp Pro Gln
                    295 300
Thr Leu Asp Thr Glu Gln Gln Trp Asp Thr Pro Cys Pro Arg Glu Asn
                  310
                                    315
Ala Glu Ala Ala Phe Val Ile Cys Gly Thr Leu Tyr Val Val Tyr Asn
                                330 335
              325
Thr Arg Pro Ala Ser Arg Ala Arg Ile Gln Cys Ser Phe Asp Ala Ser
                             345 350
Gly Thr Leu Thr Pro Glu Arg Ala Ala Leu Pro Tyr Phe Pro Arg Arg
                        360
Tyr Gly Ala His Ala Ser Leu Arg Tyr Asn Pro Arg Glu Arg Gln Leu
                                       380
                     375
Tyr Ala Trp Asp Asp Gly Tyr Gln Ile Val Tyr Lys Leu Glu Met Arg
                 390
                                    395
Lys Lys Glu Glu Glu Val
              405 406
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<210> 1047 <211> 268 <212> PRT <213> Homo sapiens

<400> 1047
Met Ile Gln Lys Ile Leu Phe Lys Asp Leu Phe Arg Phe Leu Leu Val
1 5 10 15

Tyr Leu Leu Phe Met Ile Gly Tyr Ala Ser Ala Leu Val Ser Leu Leu 20 25 Asn Pro Cys Ala Asn Met Lys Val Cys Asn Glu Asp Gln Thr Asn Cys 35 40 Thr Val Pro Thr Tyr Pro Ser Cys Arg Asp Ser Glu Thr Phe Ser Thr 55 60 Phe Leu Leu Asp Leu Phe Lys Leu Thr Ile Gly Met Gly Asp Leu Glu 75 Met Leu Ser Ser Thr Lys Tyr Pro Val Val Phe Ile Ile Leu Leu Val 85 90 95 Thr Tyr Ile Ile Leu Thr Phe Val Leu Leu Asn Met Leu Ile Ala 100 105 110 Leu Met Gly Glu Thr Val Gly Gln Val Ser Lys Glu Ser Lys His Ile 115 120 125 Trp Lys Leu Gln Trp Ala Thr Thr Ile Leu Asp Ile Glu Arg Ser Phe 130 135 140 Pro Val Phe Leu Arg Lys Ala Phe Arg Ser Gly Glu Met Val Thr Val 150 155 Gly Lys Ser Ser Asp Gly Thr Pro Asp Arg Trp Cys Phe Arg Val 165 170 Asp Glu Val Asn Trp Ser His Trp Asn Gln Asn Leu Gly Ile Ile Asn 185 190 180 Glu Asp Pro Gly Lys Asn Glu Thr Tyr Gln Tyr Tyr Gly Phe Ser His 200 205 195 Thr Val Gly Arg Leu Arg Arg Asp Arg Trp Ser Ser Val Val Pro Arg 215 Val Val Glu Leu Asn Lys Asn Ser Asn Pro Asp Glu Val Val Val Pro 235 230 Leu Asp Ser Met Gly Asn Pro Arg Cys Asp Gly His Gln Gln Gly Tyr 245 250 Pro Arg Lys Trp Arg Thr Asp Asp Ala Pro Leu * 260 265 267

<210> 1048 <211> 59 <212> PRT <213> Homo sapiens

<210> 1049 <211> 77 <212> PRT <213> Homo sapiens

PCT/US01/02687 WO 01/54477

<400> 1049 Met Arg Cys Arg Cys Cys Leu Cys Ser Ser Cys Phe Trp Gly Leu Trp 10 Asp Pro Cys Pro Lys Ser Val Trp Ser Pro Trp Ser Ser Ser Ser Leu 25 Gly Ala Phe Ser Val Gly Ser Glu Leu Ala Ser Ala Ala Ser Ser Leu 35 40 Ser Pro Pro Ser Cys Ser Pro Arg Thr Ala Pro Arg Ser Thr Ala Lys 55 Leu Cys Leu Arg Trp Ser Arg Pro Gly Asn Cys Gly *

<210> 1050 <211> 474 <212> PRT

<213> Homo sapiens

<400> 1050 Met Arg Ala Leu Val Leu Leu Gly Cys Leu Leu Ala Ser Leu Leu Phe 10 Ser Gly Gln Ala Glu Glu Thr Glu Asp Ala Asn Glu Glu Ala Pro Leu 25 20 Arg Asp Arg Ser His Ile Glu Lys Thr Leu Met Leu Asn Glu Asp Lys 40 35 Pro Ser Asp Asp Tyr Ser Ala Val Leu Gln Arg Leu Arg Lys Ile Tyr 55 His Ser Ser Ile Lys Pro Leu Glu Gln Ser Tyr Lys Tyr Asn Glu Leu 70 75 Arg Gln His Glu Ile Thr Asp Gly Glu Ile Thr Ser Lys Pro Met Val 85 90 Leu Phe Leu Gly Pro Trp Ser Val Gly Lys Ser Thr Met Ile Asn Tyr 100 105 Leu Leu Gly Leu Glu Asn Thr Arg Tyr Gln Leu Tyr Thr Gly Ala Glu 115 120 Pro Thr Thr Ser Glu Phe Thr Val Leu Met His Gly Pro Lys Leu Lys 135 140 Thr Ile Glu Gly Ile Val Met Ala Ala Asp Ser Ala Arg Ser Phe Ser 150 155 Pro Leu Glu Lys Phe Gly Gln Asn Phe Leu Glu Lys Leu Ile Gly Ile 165 170 Glu Val Pro His Lys Leu Leu Glu Arg Val Thr Phe Val Asp Thr Pro 185 Gly Ile Ile Glu Asn Arg Lys Gln Gln Glu Arg Gly Tyr Pro Phe Asn 200 205 Asp Val Cys Gln Trp Phe Ile Asp Arg Ala Asp Leu Ile Phe Val Val 215 220 Phe Asp Pro Thr Lys Leu Asp Val Gly Leu Glu Leu Glu Met Leu Phe 230 235 Arg Gln Leu Lys Gly Arg Glu Ser Gln Ile Arg Ile Ile Leu Asn Lys 245 250 Ala Asp Asn Leu Ala Thr Gln Met Leu Met Arg Val Tyr Gly Ala Leu 260 265 270 Phe Trp Ser Leu Ala Pro Leu Ile Asn Val Thr Glu Pro Pro Arg Val 280 285 Tyr Val Ser Ser Phe Trp Pro Gln Glu Tyr Lys Pro Asp Thr His Gln 300 295

Glu Leu Phe Leu Gln Glu Glu Ile Ser Leu Leu Glu Asp Leu Asn Gln . 310 315 Val Ile Glu Asn Arg Leu Glu Asn Lys Ile Ala Phe Ile Arg Gln His 330 325 Ala Ile Arg Val Arg Ile His Ala Leu Leu Val Asp Arg Tyr Leu Gln 345 .350 Thr Tyr Lys Asp Lys Met Thr Phe Phe Ser Asp Gly Glu Leu Val Phe 360 355 Lys Asp Ile Val Glu Asp Pro Asp Lys Phe Tyr Ile Phe Lys Thr Ile 370 375 380 Leu Ala Lys Thr Asn Val Ser Lys Phe Asp Leu Pro Asn Arg Glu Ala 390 395 400 Tyr Lys Asp Phe Phe Gly Ile Asn Pro Ile Ser Ser Phe Lys Leu Leu 405 410 Ser Gln Gln Cys Ser Tyr Met Gly Gly Cys Phe Leu Glu Lys Ile Glu 425 420 Arg Ala Ile Thr Gln Glu Leu Pro Gly Leu Leu Gly Ser Leu Gly Leu 440 445 Gly Lys Asn Pro Gly Ala Leu Asn Cys Asp Lys Thr Gly Cys Ser Glu 455 Thr Pro Lys Asn Arg Tyr Arg Lys His * 470

<210> 1051 <211> 47 <212> PRT <213> Homo sapiens

<210> 1052 <211> 233 <212> PRT <213> Homo sapiens

<400> 1052 Met Ala Trp Thr Pro Leu Trp Leu Thr Leu Leu Thr Leu Cys Ile Gly 5 10 Ser Val Val Ser Ser Glu Leu Thr Gln Asp Pro Thr Val Ser Val Ala 20 25 Leu Gly Gln Thr Leu Arg Ile Lys Cys Gln Gly Asp Thr Ile Arg Ser 35 40 Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ile Leu 55 Val Ile Tyr Gly Gln Asn Asn Arg Pro Ser Gly Ile Pro Gly Arg Phe 75 70 Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu

90 85 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Cys Ser Tyr Ala Gly Arg 100 , 105 110 Thr Thr Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln 115 120 125 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu 130 135 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr 155 160 150 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys 165 170 175 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr 180 185 190 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His 195 200 205 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys 215 Thr Val Ala Pro Thr Glu Cys Ser * 230 232

<210> 1053 <211> 147 <212> PRT

<213> Homo sapiens

<400> 1053 · Met Gly Ala Asp Arg Gly Pro His Val Val Leu Trp Thr Leu Ile Cys 10 Leu Pro Val Val Phe Ile Leu Ser Phe Val Val Ser Phe Tyr Tyr Gly 25 Thr Ile Thr Trp Tyr Asn Ile Phe Leu Val Tyr Asn Glu Glu Arg Thr 40 45 Phe Trp His Lys Ile Ser Tyr Cys Pro Cys Leu Val Leu Phe Tyr Pro 60 50 55 Val Leu Ile Met Ala Met Ala Ser Ser Leu Gly Leu Tyr Ala Ala Val 65 70 75 Val Gln Leu Ser Trp Ser Trp Glu Ala Trp Trp Gln Ala Ala Arg Asp 85 90 95 Met Glu Lys Gly Phe Cys Gly Trp Leu Cys Ser Lys Leu Gly Leu Glu 100 105 110 Asp Cys Ser Pro Tyr Ser Ile Val Glu Leu Leu Glu Ser Asp Asn Ile 115 120 125 Ser Ser Thr Leu Ser Asn Lys Asp Pro Ile Gln Glu Val Glu Thr Ser 135 130 Thr Val * 145 146

<210> 1054 <211> 123 <212> PRT <213> Homo sapiens

<400> 1054

Met Tyr Val Thr Leu Val Phe Arg Val Lys Gly Ser Arg Leu Val Lys 10 Pro Ser Leu Cys Leu Ala Leu Leu Cys Pro Ala Phe Leu Val Gly Val 25 Val Arg Val Ala Glu Tyr Arg Asn His Trp Ser Asp Val Leu Ala Gly 40 Phe Leu Thr Gly Ala Ala Ile Ala Thr Phe Leu Val Thr Cys Val Val . 60 55 His Asn Phe Gln Ser Arg Pro Pro Ser Gly Arg Arg Leu Ser Pro Trp 65 . 70 . 75 Glu Asp Leu Gly Gln Ala Pro Thr Met Asp Ser Pro Leu Glu Lys Asn 90 85 Pro Arg Ser Ala Gly Arg Ile Arg His Arg His Gly Ser Pro His Pro 105 Ser Arg Arg Thr Ala Pro Ala Val Ala Thr * 120 122

<210> 1055 <211> 122 <212> PRT <213> Homo sapiens

<400> 1055 Met Leu Thr Cys Leu Phe Ser Phe Gln Gly Cys Trp Arg Ala Arg Gly 10 Trp Gln Arg Leu Cys Glu Gly Arg Arg Gly Trp Pro Gly Val Gly Gln Arg Thr Leu Lys Val Ser Glu Pro Ala Pro Leu Arg Val Gly Arg Ala 40 Leu Pro Gln Ala Leu Leu Gly Ala Arg Pro His Cys Val Phe Pro Gly 50 55 Gly Glu Val Leu Gly Val Glu Ala Ala Phe Gly Ser Ser Phe Ile Leu 65 . 70 Ser Thr Phe Phe Leu His Gln Pro Leu Phe Pro Gly Pro Lys Leu 90 Arg Ala Thr Gln Tyr Leu Ile Ser Ser Asp Pro Thr His Leu Pro Ala 100 105 Gly Arg Gly Pro Asn Ser Val Ser Met * 115 120 121

<210> 1056 <211> 51 <212> PRT <213> Homo sapiens

50

<210> 1057 <211> 260 <212> PRT <213> Homo sapiens

<400> 1057 Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro 1 5 10 Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser 25 20 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser 40 Val Gly Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro 55 60 Arg Pro Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala 70 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser 90 Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Arg Asp 105 110 100 Asn Trp Pro Pro Gly Ala Thr Phe Gly Gly Gly Thr Lys Val Glu Ile 120 125 115 Lys His Thr Thr Gly Glu Ile Val Leu Thr Gln Ala Pro Gly Thr Leu 135 Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln 155 150 Thr Ile Gly Ser Thr Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys 165 170 175 Ala Pro Lys Leu Leu Ile Tyr Trp Phe Ile Gln Phe Ala Lys Arg Gly 185 Pro Ile Lys Val Gln Cys His Arg Val Arg Gly Gln Thr Ser Leu Ser 200 205 195 Pro Ser Ala Asp Trp Ser Leu Lys Ile Leu Gln Cys Ile Ser Val Thr 215 220 Asn Met Gly Ala His Pro Thr Leu Leu Ala Glu Gly Pro Arg Trp Arg 230 . 235 Ser Asn Glu Leu Trp Leu His His Leu Ser Ser Ser Arg His Leu . 250 245 Met Ser Ser 259

<210> 1058 <211> 52 <212> PRT <213> Homo sapiens

Trp Arg Pro Cys Leu Pro Arg Leu Arg Met Arg Val Leu Val Leu Leu 35 40 45

Ile Trp Ser * 50 51

<210> 1059 <211> 97 <212> PRT <213> Homo sapiens

 Act of the color of the co

<210> 1060 <211> 99 <212> PRT <213> Homo sapiens

<400> 1060 Met Asn Lys His Phe Leu Phe Leu Phe Leu Leu Tyr Cys Leu Ile Ala 5 10 Ala Val Thr Ser Leu Gln Cys Ile Thr Cys His Leu Arg Thr Arg Thr 25 Asp Arg Cys Arg Arg Gly Phe Gly Val Cys Thr Ala Gln Lys Gly Glu 40 35 Ala Cys Met Leu Leu Arg Ile Tyr Gln Arg Asn Thr Leu Gln Ile Ser 55 Tyr Met Val Cys Gln Lys Phe Cys Arg Asp Met Thr Phe Asp Leu Arg 70 75 Asn Arg Thr Tyr Val His Thr Cys Cys Asn Tyr Asn Tyr Cys Asn Phe 90 Lys Leu * 98

<210> 1061 <211> 64 <212> PRT <213> Homo sapiens

<210> 1062 <211> 149 <212> PRT <213> Homo sapiens

<400> 1062 Met Tyr Leu Ser Asn Thr Thr Val Thr Ile Leu Ala Asn Leu Val Pro 5 10 Phe Thr Leu Thr Leu Ile Ser Phe Leu Leu Leu Ile Cys Ser Leu Cys 20 25 Lys His Leu Lys Lys Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro 40 Ser Met Lys Val His Ile Lys Ala Leu Gln Thr Val Thr Ser Phe Leu 60 Leu Leu Cys Ala Ile Tyr Phe Leu Ser Met Ile Ile Ser Val Cys Asn 70 Phe Gly Arg Leu Glu Lys Gln Pro Val Phe Met Phe Cys Gln Ala Ile 85 90 Ile Phe Ser Tyr Pro Ser Thr His Pro Phe Ile Leu Ile Leu Gly Asn 105 100 Lys Lys Leu Lys Gln Ile Phe Leu Ser Val Leu Arg His Val Arg Tyr 120 125 Trp Val Lys Asp Arg Ser Leu Arg Leu His Arg Phe Thr Arg Gly Ala 135 Leu Cys Val Phe * 148

<210> 1063 <211> 63 <212> PRT <213> Homo sapiens

<210> 1064
<211> 92
<212> PRT
<213> Homo sapiens

<400> 1064 Met Met Leu Met Ser Leu Gly Gly Leu Leu Gly Pro Pro Leu Ser Gly 1 5 10 Phe Leu Arg Asp Glu Thr Gly Asp Phe Thr Ala Ser Phe Leu Leu Ser 20 25 Gly Ser Leu Ile Leu Ser Gly Ser Phe Ile Tyr Ile Gly Leu Pro Arg 40 45 Ala Leu Pro Ser Cys Gly Pro Ala Ser Pro Pro Ala Thr Pro Pro Pro 55 Glu Thr Gly Glu Leu Leu Pro Ala Pro Gln Ala Val Leu Leu Ser Pro 70 Gly Gly Pro Gly Ser Thr Leu Asp Thr Thr Cys * 85

<210> 1065 <211> 67 <212> PRT <213> Homo sapiens

<400> 1065

<210> 1066 <211> 78 <212> PRT <213> Homo sapiens

50 55 60 Leu Ala Gly Trp Asp Leu Thr Gly Ala Pro Gly Ser Leu Gly 65 70 75 78

<210> 1067 <211> 55 <212> PRT <213> Homo sapiens

<210> 1068 <211> 48 <212> PRT <213> Homo sapiens

<210> 1069 <211> 64 <212> PRT <213> Homo sapiens

<210> 1070

<211> 73 . <212> PRT <213> Homo sapiens

<400> 1070 Met Pro Ser Ile Arg Leu Gly Leu Ser His Leu Phe Leu Thr Ala Gly 10 Ile Tyr Cys Leu Leu Cys Ala Arg Cys Cys Ala Leu Gly Arg Gly Thr Ala Trp Ala Ala Cys Pro Gly Gly Ala Cys Gly Leu Met Gly Glu 35 40 Ala Asp Pro Ser Pro Pro His Cys Gln Gln Gly Gln Gly Lys Ser Thr 55 His Arg Gly Leu Ile Pro Tyr Val * 70

<210> 1071 <211> 152 <212> PRT <213> Homo sapiens

<400> 1071 Met Phe Trp Thr Met Ile Ile Leu Leu Gln Val Leu Ile Pro Ile Ser 5 10 Leu Tyr Val Ser Ile Glu Ile Val Lys Leu Gly Gln Ile Tyr Phe Ile 20 25 Gln Ser Asp Val Asp Phe Tyr Asn Glu Lys Met Asp Ser Ile Val Gln 35 40 Cys Arg Ala Leu Asn Ile Ala Glu Asp Leu Gly Gln Ile Gln Tyr Leu 55 Phe Ser Asp Lys Thr Gly Thr Leu Thr Glu Asn Lys Met Val Phe Arg 70 75 Arg Trp Ser Gly Gly Arg Phe Asp Tyr Cys Pro Gly Glu Lys Ala Arg 90 Arg Val Glu Ser Phe Gln Glu Ala Ala Phe Glu Glu His Phe Leu 105 Thr Thr Gly Arg Gly Phe Leu Thr His Met Ala Asn Pro Arg Ala Pro 120 125 Pro Leu Ala Asp Thr Phe Lys Met Gly Ala Ser Gly Arg Leu Ser Pro 135 Pro Ser Leu Thr Ala Arg Gly Ala 150 152

<210> 1072 <211> 113 <212> PRT

<213> Homo sapiens

<400> 1072 Met Thr Ala Gly Val Leu Trp Gly Leu Phe Gly Val Leu Gly Phe Thr 10 Gly Val Ala Leu Leu Leu Tyr Ala Leu Phe His Lys Ile Ser Gly Glu

<210> 1073 <211> 52 <212> PRT <213> Homo sapiens

<210> 1074 <211> 78 <212> PRT <213> Homo sapiens

<210> 1075 <211> 253 <212> PRT <213> Homo sapiens

<400> 1075 Met Ser Ser Ser Pro Gly Leu Leu Phe Ser Ser Leu Ser His Leu Leu 10 Leu Asn Ser Ser Thr Leu Ala Leu Leu Thr His Arg Leu Ser Gln Met 20 25 Thr Cys Leu Gln Ser Leu Arg Leu Asn Arg Asn Ser Ile Gly Asp Val 40 Gly Cys Cys His Leu Ser Glu Ala Leu Arg Ala Ala Thr Ser Leu Glu 55 Glu Leu Asp Leu Ser His Asn Gln Ile Gly Asp Ala Gly Asp Gln His 70 7.5 Leu Ala Thr Ile Leu Pro Gly Leu Pro Glu Leu Arg Lys Ile Asp Leu 85 Ser Gly Asn Ser Ile Ser Ser Ala Gly Gly Val Gln Leu Ala Glu Ser 100 105 Leu Val Leu Cys Arg Arg Leu Glu Glu Leu Met Leu Gly Cys Asn Ala 120 125 Leu Gly Asp Pro Thr Ala Leu Gly Leu Ala Gln Glu Leu Pro Gln His 135 140 Leu Arg Val Leu His Leu Pro Phe Ser His Leu Gly Pro Asp Gly Ala 150 155 Leu Ser Leu Ala Gln Asp Leu Asp Gly Ser Pro His Leu Glu Glu Ile 165 170 Ser Leu Ala Glu Asn Asn Leu Ala Gly Gly Val Leu Arg Phe Cys Met 180 185 Glu Leu Pro Leu Leu Arg Gln Ile Glu Leu Ser Trp Asn Leu Leu Gly 195 200 205 Asp Glu Ala Ala Ala Glu Leu Ala Gln Val Leu Pro Gln Met Gly Arg 215 220 Leu Lys Arg Val Glu Tyr Glu Gly Pro Gly Glu Glu Trp Asp Gly Leu 230 · 235 Lys Gly Asp Leu His Pro Gly Asn Thr Lys Arg Pro Leu 250

<210> 1076 <211> 64 <212> PRT <213> Homo sapiens

<210> 1077 <211> 147 <212> PRT <213> Homo sapiens

<400> 1077 Met Met Lys Ser Leu Arg Val Leu Leu Val Ile Leu Trp Leu Gln Leu 10 Ser Trp Val Trp Ser Gln Gln Lys Glu Val Glu Gln Asn Ser Gly Pro 20 Leu Ser Val Pro Glu Gly Ala Ile Ala Ser Leu Asn Cys Thr Tyr Ser 35 40 Asp Arg Gly Ser Gln Ser Phe Phe Trp Tyr Arg Gln Tyr Ser Gly Lys 55 60 Ser Pro Glu Leu Ile Met Ser Ile Tyr Ser Asn Gly Asp Lys Glu Asp 70 75 Gly Arg Phe Thr Ala Gln Leu Asn Lys Ala Ser Gln Tyr Val Ser Leu 90 Leu Ile Arg Asp Ser Gln Pro Ser Asp Ser Ala Thr Tyr Leu Cys Ala 100 105 110 Asp Tyr Ser Gly Asn Thr Pro Leu Val Phe Gly Lys Gly Thr Arg Leu 120 125 Ser Val Ile Ala Asn Ile Gln Asn Pro Asp Pro Ala Leu Tyr Gln Leu 135 140 Arg Asp Ser 145 147

<210> 1078 <211> 55 <212> PRT <213> Homo sapiens

<210> 1079 <211> 97 <212> PRT <213> Homo sapiens

Leu Met Lys Asp Pro Arg Phe Trp Ile Ala Ile Ala Ala Tyr Leu Ala 65 70 75 80

Cys Val Leu Phe Ala Val Phe Phe Asn Ile Phe Leu Ser Pro Ala Asn 85 90 95 96

<210> 1080 <211> 134 <212> PRT

<213> Homo sapiens

<400> 1080 Met Leu Ser Ile Leu Leu Ala Thr Leu Thr Leu Ser Leu Lys Glu Lys 1 5 10 Arg Gly Glu Arg Ser Ile His Gln Pro Glu Pro Ser Glu Lys Ser Val 20 25 Cys Leu Pro Val Ser Gly Ala Asp Pro Phe Arg Gly Ser Arg Gly Arg 40 Gly Lys Glu Ile Arg Arg Glu Lys Asp Ile Gly Leu Leu Glu His Val Gly Gln Glu Val Pro Arg Ile Cys Glu Gln Leu Pro Asp Ser Lys 70 Ala Leu Ala Arg Pro Gln Asp Gly Pro Cys Leu Leu Asp Ile Arg Lys 85 90 Pro Lys Gly Gln Asn Lys Asn Thr Cys Leu Val Gly Glu Gly Ser Leu 105 110 Arg Gly His Gln Val Gly Gln Ile Pro Leu Val Thr His Leu Trp Arg 115 Leu Pro Gln Lys Cys 130 133

<210> 1081 <211> 185 <212> PRT <213> Homo sapiens

<400> 1081

Met Lys Ile Leu Val Ala Phe Leu Val Val Leu Thr Ile Phe Gly Ile 10 Gln Ser His Gly Tyr Glu Val Phe Asn Ile Ile Ser Pro Ser Asn Asn 20 25 Gly Gly Asn Val Gln Glu Thr Val Thr Ile Asp Asn Glu Lys Asn Thr 40 Ala Ile Ile Asn Ile His Ala Gly Ser Cys Ser Ser Thr Thr Ile Phe 55 60 Asp Tyr Lys His Gly Tyr Ile Ala Ser Arg Val Leu Ser Arg Arg Ala 70 75 Cys Phe Ile Leu Lys Met Asp His Gln Asn Ile Pro Pro Leu Asn Asn 90 Leu Gln Trp Tyr Ile Tyr Glu Lys Gln Ala Leu Asp Asn Met Phe Ser 100 105 Ser Lys Tyr Thr Trp Val Lys Tyr Asn Pro Leu Glu Ser Leu Ile Lys

<210> 1082 <211> 285 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(285) <223> Xaa = any amino acid or nothing

<400> 1082 Met Val Ile Ala Leu Ile Ile Phe Leu Arg Ser Pro Ala Met Ala Gly 10 Gly Leu Phe Ala Ile Glu Arg Glu Phe Phe Phe Glu Leu Gly Leu Tyr 25 Asp Pro Gly Leu Gln Ile Trp Gly Gly Glu Asn Phe Glu Ile Ser Tyr 40 Lys Ile Trp Gln Cys Gly Gly Lys Leu Leu Phe Xaa Pro Cys Ser Arg Val Gly His Ile Tyr Arg Leu Glu Gly Trp Gln Gly Asn Pro Pro Pro 70 Ile Tyr Val Gly Ser Ser Pro Thr Leu Lys Asn Tyr Val Arg Val Val 85 90 Glu Val Trp Trp Asp Glu Tyr Lys Asp Tyr Phe Tyr Ala Ser Arg Pro 105 Glu Ser Gln Ala Leu Pro Tyr Gly Asp Ile Ser Glu Leu Lys Lys Phe 120 Arg Glu Asp His Asn Cys Lys Ser Phe Lys Trp Phe Met Glu Glu Ile 135 140 Ala Tyr Asp Ile Thr Ser His Tyr Pro Leu Pro Pro Lys Asn Val Asp 150 155 Trp Gly Glu Ile Arg Gly Phe Glu Thr Ala Tyr Cys Ile Asp Ser Met 170 Gly Lys Thr Asn Gly Gly Phe Val Glu Leu Gly Pro Cys His Arg Met 185 Gly Gly Asn Gln Leu Phe Arg Ile Asn Glu Ala Asn Gln Leu Met Gln 200 Tyr Asp Gln Cys Leu Thr Lys Gly Ala Asp Gly Ser Lys Val Met Ile 215 220 Thr His Cys Asn Leu Asn Glu Phe Lys Glu Trp Gln Tyr Phe Lys Asn 230 235 Leu His Arg Phe Thr His Ile Pro Ser Gly Lys Cys Leu Asp Arg Ser 245 250 Glu Val Leu His Gln Val Phe Ile Ser Asn Cys Asp Ser Ser Lys Thr 265 Thr Gln Lys Trp Glu Met Asn Asn Ile His Ser Val * 280

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<210> 1083
<211> 73
<212> PRT
<213> Homo sapiens
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<210> 1084
<211> 56
<212> PRT
<213> Homo sapiens

<210> 1085 <211> 68 <212> PRT <213> Homo sapiens

<210> 1086 <211> 62 <212> PRT <213> Homo sapiens

<210> 1087 <211> 294 <212> PRT <213> Homo sapiens

<400> 1087 Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu 5 10 Leu Val Ala Glu Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala 25 Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu Leu 35 45 Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu 55 Gly Val Lys Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr 70 Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg 90 95 Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys 120 Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe 140 135 Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro 150 155 160 Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser 170 165 Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu 185 Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala 200 Gly Glu Leu Ala Gly Gln Glu Glu Glu Glu Ala Leu Glu Gly Leu Glu 215 220 Val Met Asp Val Phe Leu Arg Phe Ser Gly Leu His Leu Phe Arg Ala 230 235 Val Glu Pro Gly Leu Val Gln Lys Phe Ser Leu Arg Asp Cys Ser Pro 245 250

Arg Leu Ser Glu Glu Leu Tyr His Arg Cys Arg Leu Ser Asn Leu Glu
260 265 270

Gly Leu Gly Gly Arg Ala Gln Leu Ala Met Ala Leu Phe Glu Gln Glu
275 280 285

Gln Ala Asn Ser Thr *
290 293

<210> 1088 <211> 477 <212> PRT <213> Homo sapiens

<400> 1088 Met Gln Trp Lys Val Thr Leu Thr Ser Arg Trp Gly Leu Leu Arg His 5 10 Cys Gln Val Leu Ala Gly Leu Leu His Leu Gly Asn Ile Gln Phe Ala 20 25 Ala Ser Glu Asp Glu Ala Gln Pro Cys Gln Pro Met Asp Asp Ala Lys 40 45 Tyr Ser Val Arg Thr Ala Ala Ser Leu Leu Gly Leu Pro Glu Asp Val 55 Leu Leu Glu Met Val Gln Ile Lys Thr Ile Arg Ala Gly Arg Gln Gln 70 75 Gln Val Phe Arg Lys Pro Cys Ala Arg Ala Glu Cys Asp Thr Arg Arg 85 90 Asp Cys Leu Ala Lys Leu Ile Tyr Ala Arg Leu Phe Asp Trp Leu Val 105 Ser Val Ile Asn Ser Ser Ile Cys Ala Asp Thr Asp Ser Trp Thr Thr 120 125 Phe Ile Gly Leu Leu Asp Val Tyr Gly Phe Glu Ser Phe Pro Asp Asn 135 Ser Leu Glu Gln Leu Cys Ile Asn Tyr Ala Asn Glu Lys Leu Gln Gln 150 155 His Phe Val Ala His Tyr Leu Arg Ala Gln Gln Glu Glu Tyr Ala Val 165 170 Glu Gly Leu Glu Trp Ser Phe Ile Asn Tyr Gln Asp Asn Gln Pro Cys 185 Leu Asp Leu Ile Glu Gly Ser Pro Ile Ser Ile Cys Ser Leu Ile Asn 195 200 Glu Glu Cys Arg Leu Asn Arg Pro Ser Ser Ala Ala Gln Leu Gln Thr 215 220 Arg Ile Glu Thr Ala Leu Ala Gly Ser Pro Cys Leu Gly His Asn Lys 230 235 240 Leu Ser Arg Glu Pro Ser Phe Ile Val Val His Tyr Ala Gly Pro Val 250 Arg Tyr His Thr Ala Gly Leu Val Glu Lys Asn Lys Asp Pro Ile Pro 265 Pro Glu Leu Thr Arg Leu Leu Gln Gln Ser Gln Asp Pro Leu Leu Met 280 Gly Leu Phe Pro Thr Asn Pro Lys Glu Lys Thr Gln Glu Glu Pro Pro 295 300 Gly Gln Ser Arg Ala Pro Val Leu Thr Val Val Ser Lys Phe Lys Ala 310 315 Ser Leu Glu Gln Leu Leu Gln Val Leu His Ser Thr Thr Pro His Tyr 330 Ile Arg Cys Ile Met Pro Asn Ser Gln Gly Gln Ala Gln Thr Phe Leu

340 345 Gln Glu Glu Val Leu Ser Gln Leu Glu Ala Cys Gly Leu Val Glu Thr 360 Ile His Ile Ser Ala Ala Gly Phe Pro Ile Arg Val Ser His Arg Asn 375 Phe Val Glu Arg Tyr Lys Leu Leu Arg Arg Leu His Pro Cys Thr Ser 390 395 Ser Gly Pro Asp Ser Pro Tyr Pro Ala Lys Gly Leu Pro Glu Trp Cys 405 410 Pro His Ser Glu Glu Ala Thr Leu Glu Pro Leu Ile Gln Asp Ile Leu 420 425 His Thr Leu Pro Val Leu Thr Gln Ala Ala Ile Thr Gly Asp Ser 440 445 Ala Glu Ala Met Pro Ala Pro Met His Cys Gly Arg Thr Lys Val Phe 455 460 Met Thr Asp Ser Met Leu Glu Leu Leu Glu Cys Gly Ala 470 475

<210> 1089 <211> 66 <212> PRT <213> Homo sapiens

<210> 1090 <211> 185 <212> PRT <213> Homo sapiens

<400> 1090 Met Leu Trp Leu Leu Phe Phe Leu Val Thr Ala Ile His Ala Glu Leu 1 . 5 10 Cys Gln Pro Gly Ala Glu Asn Ala Phe Lys Val Arg Leu Ser Ile Arg 25 Thr Ala Leu Gly Asp Lys Ala Tyr Ala Trp Asp Thr Asn Glu Glu Tyr 40 Leu Phe Lys Ala Met Val Ala Phe Ser Met Arg Lys Val Pro Asn Arg 55 . 60 Glu Ala Thr Glu Ile Ser His Val Leu Leu Cys Asn Val Thr Gln Arg 70 75 Val Ser Phe Trp Phe Val Val Thr Asp Pro Ser Lys Asn His Thr Leu 90

 Pro
 Ala
 Val
 Glu
 Val
 Glu
 Ser
 Ala
 Ile
 Arg
 Met
 Asn
 Lys
 Asn
 Arg
 Ile

 Asn
 Asn
 Ala
 Phe
 Leu
 Asn
 Asp
 Glu
 Thr
 Leu
 Glu
 Phe
 Leu
 Lys
 Ile

 Pro
 Ser
 Thr
 Leu
 Ala
 Pro
 Pro
 Met
 Asp
 Pro
 Ser
 Val
 Pro
 Ile
 I

<210> 1091 <211> 47 <212> PRT <213> Homo sapiens

<210> 1092 <211> 46 <212> PRT <213> Homo sapiens

<210> 1093 <211> 64 <212> PRT <213> Homo sapiens

Ala Gly Asp Pro Met Pro Ala Ala Ser Arg Leu Phe His Glu Arg Gln

35 40 45
Ser Leu Pro Gly Ala Pro Ala Thr Ser Ala Ser Pro Ser Val Leu *
50 55 60 63

<210> 1094

<211> 85

<212> PRT

<213> Homo sapiens

<400> 1094

 Met
 His
 Phe
 Leu
 Ala
 Thr
 Phe
 Ala
 Leu
 Phe
 Phe
 Ile
 Phe
 Gly
 Val
 Phe

 Phe
 Leu
 Phe
 Ala
 Leu
 Thr
 Asn
 Leu
 Leu
 Leu
 Ala
 Glu
 Glu
 Val
 Asn

 Ile
 Arg
 Gly
 Gly
 Asn
 Phe
 Leu
 Gly
 Ser
 Phe
 Leu
 Val
 His
 Thr
 Leu
 Phe

 Leu
 Asp
 Gln
 Val
 Pro
 Gly
 Glu
 Ile
 Thr
 His
 Thr
 Leu
 Phe

 Leu
 Asp
 Gln
 Val
 Pro
 Gly
 Glu
 Ile
 Thr
 His
 Asp
 Leu
 Val
 Leu
 Leu
 Phe
 Leu
 Val
 Leu

<210> 1095

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1095

<210> 1096

<211> 158

<212> PRT

<213> Homo sapiens

<400> 1096

Met Phe Val Ile Ala Phe Leu Ser Pro Leu Ser Leu Ile Phe Leu Ala 1 5 10 15

Lys Phe Leu Lys Lys Ala Asp Thr Arg Asp Ser Arg Gln Ala Cys Leu 25 Ala Ala Ser Leu Ala Leu Ala Leu Asn Gly Val Phe Thr Asn Thr Ile Lys Leu Ile Val Gly Arg Pro Arg Pro Asp Phe Phe Tyr Arg Cys Phe 55 Pro Asp Gly Leu Ala His Ser Asp Leu Met Cys Thr Gly Asp Lys Asp 70 Val Val Asn Glu Gly Arg Lys Ser Phe Pro Ser Gly His Ser Ser Phe 90 Ala Phe Ala Gly Leu Ala Phe Ala Ser Phe Tyr Leu Ala Gly Lys Leu 105 His Cys Phe Thr Pro Gln Gly Arg Gly Lys Ser Trp Arg Phe Cys Ala 120 Phe Leu Ser Pro Leu Leu Phe Ala Ala Val Ile Ala Leu Ser Arg Thr 130 135 Cys Asp Tyr Lys His His Trp Gln Gly Pro Phe Lys Trp

<210> 1097 <211> 88 <212> PRT <213> Homo sapiens

<400> 1097

<210> 1098 <211> 58 <212> PRT <213> Homo sapiens

<400> 1098

 Met Met Ser Gly Trp Leu Leu Arg Ala Ala Ile Cys Arg Gly Leu Leu

 1
 5
 10
 15

 Ser Ser Glu Ser Leu Thr Phe Thr Ser Ala Pro His Ser Ile Ser Ile
 30

 Ala Val Thr Cys Arg Asp Gly Asn Leu Gln Thr Gly Tyr Arg Pro Thr
 35
 40
 45

 His Val Val Phe Leu Ser Thr Ala Arg
 *

 50
 55
 57

<210> 1099 <211> 72 <212> PRT <213> Homo sapiens

<400> 1099

 Met Ala Ser Glu Pro Cys Trp Trp Ala Gly Met Leu Pro Cys Ala Cys

 1
 5
 10
 15

 Ala Gly Leu Arg Arg Cys Ser His Ser Arg Phe Leu Gln Arg Gly His
 20
 25
 30

 Gly Leu His Ser Leu Met Gly Ser Leu Pro Ala Pro Ile Ser Pro Pro
 35
 40
 45

 Trp Thr His Pro Trp Gly Ile Ile Leu Pro Trp Pro Ile Arg Gly His
 50
 55
 60

 Pro Ser Val Pro Ile Arg Leu *
 70
 71

<210> 1100 <211> 47 <212> PRT <213> Homo sapiens

<400> 1100

 Met
 Ser
 Phe
 Leu
 Ile
 Leu
 Gly
 Val
 Gly
 Ser
 Cys
 Leu
 Ser
 Tyr
 Ser

 Leu
 Val
 Pro
 Leu
 Ile
 Ile
 Leu
 Ser
 Phe
 Cys
 His
 Phe
 Tyr
 Pro
 Glu
 Ser

 Val
 Gly
 Cys
 Pro
 Asp
 Ala
 Pro
 Ser
 Pro
 Arg
 Val
 Arg
 Val

 35
 40
 45
 47

<210> 1101 <211> 130 <212> PRT <213> Homo sapiens

<400> 1101

Met Arg Pro Leu Lys Pro Gly Ala Pro Leu Pro Ala Leu Phe Leu Leu 10 Ala Leu Ala Leu Ser Pro His Gly Ala His Gly Arg Pro Arg Gly Arg 25 Arg Gly Ala Arg Val Thr Asp Lys Glu Pro Lys Pro Leu Leu Phe Leu 35 40 45 Pro Ala Ala Gly Ala Gly Arg Thr Pro Ser Gly Ser Arg Ser Ala Glu 55 Ile Phe Pro Arg Asp Ser Asn Leu Lys Asp Lys Phe Ile Lys His Phe 75 Thr Gly Pro Val Thr Phe Ser Pro Glu Cys Ser Lys His Phe His Arg 90 Leu Tyr Tyr Asn Thr Arg Glu Cys Ser Thr Pro Ala Tyr Tyr Lys Arg 105 110

Cys Ala Arg Leu Leu Thr Arg Leu Ala Val Ser Pro Leu Cys Ser Gln
115 120 125
Thr *

129

<210> 1102 <211> 170 <212> PRT <213> Homo sapiens

<400> 1102 Met Gln Phe Val Leu Leu Arg Thr Leu Ala Tyr Ile Pro Thr Pro Ile 10 15 1 5 Tyr Phe Gly Ala Val Ile Asp Thr Thr Cys Met Leu Trp Gln Glu 25 Cys Gly Val Gln Gly Ser Cys Trp Glu Tyr Asn Val Thr Ser Phe Arg 35 40 Phe Val Tyr Phe Gly Leu Ala Ala Val Leu Lys Tyr Val Gly Cys Ile 55 60 Phe Ile Leu Leu Ala Trp Tyr Ser Ile Lys Asp Thr Glu Asp Glu Gln 70 75 80 Pro Arg Leu Arg Gln Lys Lys Ile Cys Leu Ser Thr Leu Ser Asp Thr 85 90 . 95 Met Thr Gln Pro Asp Ser Ala Gly Val Val Ser Cys Pro Leu Phe Thr 100 105 Pro Asp Gly Glu Ile His Lys Lys Thr Gly Leu Arg Lys Arg Asp Pro 120 125 115 Gly Gly Thr Thr Glu Pro Thr Pro Gly Pro Leu Arg Lys Arg Pro Leu 140 135 Cys Thr Leu Glu Ala Pro Arg Leu Pro Asn Lys Ala Pro Phe Thr Leu 145 150 155 Glu Leu Ala Leu Leu Arg Val Arg Leu *

169

<210> 1103 <211> 62 <212> PRT <213> Homo sapiens

165

<210> 1104 <211> 83

<212> PRT <213> Homo sapiens

<210> 1105 <211> 124 <212> PRT <213> Homo sapiens

<400> 1105 Met Val Phe Thr Val Thr Leu Lys Leu Ala Leu Asp Thr His Tyr Trp 10 Thr Trp Ile Asn His Phe Val Ile Trp Gly Ser Leu Leu Phe Tyr Val 25 Val Phe Ser Leu Leu Trp Gly Gly Val Ile Trp Pro Phe Leu Asn Tyr Gln Arg Met Tyr Tyr Val Phe Ile Gln Met Leu Ser Ser Gly Pro Ala 55 Trp Leu Ala Ile Val Leu Leu Val Thr Ile Ser Leu Leu Pro Asp Val 70 75 Leu Lys Lys Val Leu Cys Arg Gln Leu Trp Pro Thr Ala Thr Glu Arg 90 Val Gln Thr Lys Ser Gln Cys Leu Ser Val Glu Gln Ser Thr Ile Phe 100 105 Met Leu Ser Gln Thr Ser Ser Ser Leu Ser Phe * 120

<210> 1106 <211> 248 <212> PRT <213> Homo sapiens

Leu Glu Ser Ser Trp Pro Phe Trp Leu Thr Leu Ala Leu Ala Val Ile 55 Leu Gln Asn Met Ala Ala His Trp Val Phe Leu Glu Thr His Asp Gly 70 His Pro Gln Leu Thr Asn Arg Arg Val Leu Tyr Ala Ala Thr Phe Leu 90 Leu Phe Pro Leu Asn Val Leu Val Gly Ala Met Val Ala Thr Trp Arg 100 105 Val Leu Leu Ser Ala Leu Tyr Asn Ala Ile His Leu Gly Gln Met Asp 120 125 Leu Ser Leu Leu Pro Pro Arg Ala Ala Thr Leu Asp Pro Gly Tyr Tyr 135 Thr Tyr Arg Asn Phe Leu Lys Ile Glu Val Ser Gln Ser His Pro Ala 150 155 Met Thr Ala Phe Cys Ser Leu Leu Gln Ala Gln Ser Leu Leu Pro 165 170 175 Arg Thr Met Ala Ala Pro Gln Asp Ser Leu Arg Pro Gly Glu Glu Asp 185 Glu Gly Met Gln Leu Leu Gln Thr Lys Asp Ser Met Ala Lys Gly Ala 200 Arg Pro Gly Ala Ser Arg Gly Arg Ala Arg Trp Gly Leu Ala Tyr Thr 215 220 Leu Leu His Asn Pro Thr Leu Gln Val Phe Arg Lys Thr Ala Leu Leu 225 230 235 Gly Ala Asn Gly Ala Gln Pro * 245 247

<210> 1107 <211> 121 <212> PRT

<213> Homo sapiens

<400> 1107 Met Met Leu Ala Phe Thr Met Trp Asn Pro Trp Ile Ala Met Cys Leu 10 Leu Gly Leu Ser Tyr Ser Leu Leu Ala Cys Ala Leu Trp Pro Met Val 20 25 Ala Phe Val Val Pro Glu His Gln Leu Gly Thr Ala Tyr Gly Phe Met 40 Gin Ser Ile Gin Asn Leu Gly Leu Ala Ile Ile Ser Ile Ile Ala Gly 55 Met Ile Leu Asp Ser Arg Gly Tyr Leu Phe Leu Glu Val Phe Phe Ile 70 75 . 80 Ala Cys Val Ser Leu Ser Leu Leu Ser Val Val Leu Leu Tyr Leu Val 85 90 Asn Arg Ala Gln Gly Gly Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu 100 Glu Ile Lys Phe Ser His Thr Glu * 120 115

<210> 1108 <211> 53 <212> PRT <213> Homo sapiens

<210> 1109 <211> 259 <212> PRT <213> Homo sapiens

<400> 1109 Met His Val Val Ile Val Leu Lys Ala Leu Val Ala Val Gln Ile Leu - 5 10 Leu Ser Ile Lys Glu Tyr Thr Leu Glu Arg Asn His Met His Val Ile 20 25 Ser Val Ile Lys Val Leu Val Lys Ala Gln Thr Ser Leu Asn Ile Arg 40 Glu Tyr Thr Leu Val Lys Ser Leu Ile Ile Ala Ile Val Val Arg Lys 55 Pro Ser Val Arg Val Leu Thr Leu Phe Phe Ile Arg Glu Phe Thr Leu 70 75 Glu Lys Asn Tyr Tyr Leu Cys Thr Gln Cys Ser Lys Ser Phe Ser Gln 85 90 Ile Ser Asp Leu Ile Lys His Gln Arg Ile His Thr Gly Glu Lys Pro 105 Tyr Lys Cys Ser Glu Cys Arg Lys Ala Phe Ser Gln Cys Ser Ala Leu 115 120 Thr Leu His Gln Arg Ile His Thr Gly Lys Lys Pro Asn Pro Cys Asp 135 140 Glu Cys Gly Lys Ser Phe Ser Arg Arg Ser Asp Leu Ile Asn His Gln 150 1.55 Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Ala Cys Gly Lys 170 Ala Phe Ser Thr Cys Thr Asp Leu Ile Glu His Gln Lys Thr His Ala 185 Glu Glu Lys Pro Tyr Gln Cys Val Gln Cys Ser Arg Ser Cys Ser Gln 195 200 205 Leu Ser Glu Leu Thr Ile His Glu Glu Val His Cys Gly Glu Asp Ser 215 220 Gln Asn Val Met Asn Val Arg Lys Pro Leu Val Cys Thr Pro Thr Leu 230 235 Phe Ser Thr Arg Asp Thr Val Pro Glu Lys Asn Leu Met Asn Ala Val 245 Asp Tyr *

<210> 1110

<211> 47 <212> PRT <213> Homo sapiens

<400> 1110

<210> 1111 <211> 93 <212> PRT <213> Homo sapiens

<400> 1111

<210> 1112 <211> 71 <212> PRT <213> Homo sapiens

<210> 1113 <211> 47

<212> PRT <213> Homo sapiens

<210> 1114 <211> 55 <212> PRT <213> Homo sapiens

<210> 1115 <211> 83 <212> PRT <213> Homo sapiens

<400> 1115 Met Asn Val Ile Cys Leu Thr Leu Cys Leu Val Ser Ser Lys Cys Ser 5 10 Val Gly Gly Thr Ala Ser Phe Val Leu Leu Cys Phe Ser Leu Pro Val 25 Ser Ser Arg Arg Ala Phe Gln Glu Ser Gln Gly Trp Thr Glu Pro 40 Arg Gly Gly Pro Ser Gly Leu Pro His Thr Glu Pro Gly Phe Met Ala 55 Ser Ala Ala Thr Arg Gly Leu Ser Gly Cys Gly Ser Gln Ala Ala Val 65 70 75 Leu Thr * 82

<210> 1116 <211> 145 <212> PRT <213> Homo sapiens

<400> 1116 Met Val Leu Leu Val Val Gly Asn Leu Val Asn Trp Ser Phe Ala Leu Phe Gly Leu Ile Tyr Arg Pro Arg Asp Phe Ala Ser Tyr Met Leu Gly Ile Phe Ile Cys Asn Leu Leu Leu Tyr Leu Ala Phe Tyr Ile Ile Met Lys Leu Arg Ser Ser Glu Lys Val Leu Pro Val Pro Leu Phe Cys Ile 55 Val Ala Thr Ala Val Met Trp Ala Ala Ala Leu Tyr Phe Phe Gln 70 Asn Leu Ser Ser Trp Glu Gly Thr Pro Ala Glu Ser Arg Glu Lys Asn 90 Arg Glu Cys Ile Leu Leu Asp Phe Phe Asp Asp His Asp Ile Trp His 100 105 Phe Leu Ser Ala Thr Ala Leu Phe Phe Ser Phe Leu Asp Leu Leu Thr 120 125 Leu Asp Asp Asp Leu Asp Val Val Arg Arg Asp Gln Ile Pro Val Phe 135

<210> 1117 <211> 139 <212> PRT

<213> Homo sapiens

<400> 1117 Met Gly Asp Phe Ala Gly Val Asp Phe Val Phe Leu Val Val Cys Phe ٠10 Ala Gln Arg Gln Gly Ala Ala Glu Ala Val Gly Ala Val Leu Ala Val Leu Leu Cys Asp Thr Leu Leu Gly Val Thr Arg Leu Glu Gly Val Ile His Leu Pro Leu Tyr Phe Gly Leu Ser Gly Ile Glu Val Ile Gln Gln 55 Ala His Asn Arg Gly Ser Ser Arg Phe Gln Leu Leu Ile Arg Trp Arg 70 75 Glu Asp Glu Asp Arg Trp Cys Ser His Ser Ser Phe Asp Val His Leu 90 Gly Pro Leu Ala Glu Arg Pro His Val Ser Thr Gln Leu Leu Thr Val 100 105 Ile Ser Cys Lys Ile Phe Arg Leu Gln Ala Thr Asp Cys Glu Ser Lys 120 115 Phe Cys Pro Arg Ser Ser Ala Ala Glu Pro * 135 138

<210> 1118 <211> 194 <212> PRT <213> Homo sapiens

<400> 1118 Met Cys Leu Leu Phe Leu Leu Pro Arg Phe Pro Val Ser Trp Arg Ala 10 Gly Val Asp Gly Ala Ala Pro Ser Ser Gln Asp Leu Trp Arg Ile Arg 25 Ser Pro Cys Gly Asp Cys Glu Gly Phe Asp Val His Ile Met Asp Asp Met Ile Lys Arg Ala Leu Asp Phe Arg Glu Ser Arg Glu Ala Glu Pro 55 His Pro Leu Trp Glu Tyr Pro Cys Arg Ser Leu Ser Glu Pro Trp Gln 70 75 Ile Leu Thr Phe Asp Phe Gln Gln Pro Val Pro Leu Gln Pro Leu Cys 85 90 Ala Glu Gly Thr Val Glu Leu Lys Arg Pro Gly Gln Ser His Ala Ala 105 Val Leu Trp Met Glu Tyr His Leu Thr Pro Glu Cys Thr Leu Ser Thr 115 120 Gly Leu Leu Glu Pro Ala Asp Pro Glu Gly Gly Cys Cys Trp Asn Pro 135 140 His Cys Lys Gln Ala Val Tyr Phe Phe Ser Pro Ala Pro Asp Pro Arg 150 155 Ala Leu Leu Gly Gly Pro Arg Thr Val Ser Tyr Ala Val Glu Phe His 170 Pro Asp Thr Gly Asp Ile Ile Met Glu Phe Arg His Ala Asp Thr Pro 180 185 * qaA 193

<210> 1119 <211> 118 <212> PRT <213> Homo sapiens

<400> 1119 Met Leu Val Leu Leu Pro Arg Ser Lys Ala Met Pro Leu Leu Ser Val 5 10 Asn Val Thr Leu Ala Phe Phe Pro Arg Asn Lys Glu Ile Val Lys Tyr 20 25 Leu Leu Asn Gln Gly Ala Asp Val Thr Leu Arg Ala Lys Asn Gly Tyr 40 Thr Ala Phe Asp Leu Val Met Leu Leu Asn Asp Pro Asp Ile Phe Gly 60 Gly Glu Leu Ile Gly Phe Leu Ser Val Val Thr Glu Leu Val Arg Leu 70 Leu Ala Ser Val Phe Met Gln Val Asn Lys Asp Ile Gly Arg Arg Ser 85 90 His Gln Leu Pro Leu Pro His Ser Lys Val Pro Thr Ala Leu Glu His 100 105 Pro Ser Ala Ala Arg * 115 117

<210> 1120 <211> 842 <212> PRT

<213> Homo sapiens

<400> 1120 Met Leu Trp Gly Ser Gly Lys Cys Lys Ala Leu Thr Lys Phe Lys Phe 10 Val Phe Phe Leu Arg Leu Ser Arg Ala Gln Gly Gly Leu Phe Glu Thr Leu Cys Asp Gln Leu Leu Asp Ile Pro Gly Thr Ile Arg Lys Gln Thr Phe Met Ala Met Leu Leu Lys Leu Arg Gln Arg Val Leu Phe Leu Leu 55 Asp Gly Tyr Asn Glu Phe Lys Pro Gln Asn Cys Pro Glu Ile Glu Ala 70 Leu Ile Lys Glu Asn His Arg Phe Lys Asn Met Val Ile Val Thr Thr Thr Thr Glu Cys Leu Arg His Ile Arg Gln Phe Gly Ala Leu Thr Ala 105 Glu Val Gly Asp Met Thr Glu Asp Ser Ala Gln Ala Leu Ile Arg Glu 120 125 Val Leu Ile Lys Glu Leu Ala Glu Gly Leu Leu Gln Ile Gln Lys 135 Ser Arg Cys Leu Arg Asn Leu Met Lys Thr Pro Leu Phe Val Val Ile 155 Thr Cys Ala Ile Gln Met Gly Glu Ser Glu Phe His Ser His Thr Gln 170 Thr Thr Leu Phe His Thr Phe Tyr Asp Leu Leu Ile Gln Lys Asn Lys 185 His Lys His Lys Gly Val Ala Ala Ser Asp Phe Ile Arg Ser Leu Asp 200 205 His Cys Gly Tyr Leu Ala Leu Glu Gly Val Phe Ser His Lys Phe Asp 215 220 Phe Glu Leu Gln Asp Val Ser Ser Val Asn Glu Asp Val Leu Leu Thr 230 235 Thr Gly Leu Leu Cys Lys Tyr Thr Ala Gln Arg Phe Lys Pro Lys Tyr 245 250 Lys Phe Phe His Lys Ser Phe Gln Glu Tyr Thr Ala Gly Arg Arg Leu 265 Ser Ser Leu Leu Thr Ser His Glu Pro Glu Glu Val Thr Lys Gly Asn 280 Gly Tyr Leu Gln Lys Met Val Ser Ile Ser Asp Ile Thr Ser Thr Tyr 295 300 Ser Ser Leu Leu Arg Tyr Thr Cys Gly Ser Ser Val Glu Ala Thr Arg 310 315 Ala Val Met Lys His Leu Ala Ala Val Tyr Gln His Gly Cys Leu Leu 325 330 Gly Leu Ser Ile Ala Lys Arg Pro Leu Trp Arg Gln Glu Ser Leu Gln 345 Ser Val Lys Asn Thr Thr Glu Gln Glu Ile Leu Lys Ala Ile Asn Ile 360 Asn Ser Phe Val Glu Cys Gly Ile His Leu Tyr Gln Glu Ser Thr Ser 375 380 Lys Ser Ala Leu Ser Gln Glu Phe Glu Ala Phe Phe Gln Gly Lys Ser 390 395 Leu Tyr Ile Asn Ser Gly Asn Ile Pro Asp Tyr Leu Phe Asp Phe Phe 410 Glu His Leu Pro Asn Cys Ala Ser Ala Leu Asp Phe Ile Lys Leu Gly Phe Tyr Gly Gly Ala Met Ala Ser Trp Glu Lys Ala Ala Glu Asp Thr

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435
                        440
Gly Gly Ile His Met Glu Glu Ala Pro Glu Thr Tyr Ile Pro Ser Arg
            455
                             460
Ala Val Ser Leu Phe Phe Asn Trp Lys Gln Glu Phe Arg Thr Leu Glu
                470
                          475
Val Thr Leu Arg Asp Phe Ser Lys Leu Asn Lys Gln Asp Ile Arg Tyr
             485
                           490
Leu Gly Lys Ile Phe Ser Ser Ala Thr Ser Leu Arg Leu Gln Ile Lys
          500
                           505
Arg Cys Ala Gly Val Ala Gly Ser Leu Ser Leu Val Leu Ser Thr Cys
                        520
Lys Asn Ile Tyr Ser Leu Met Val Glu Ala Ser Pro Leu Thr Ile Glu
                 535
                                     540
Asp Glu Arg His Ile Thr Ser Val Thr Asn Leu Lys Thr Leu Ser Ile
                550
                                 555 560
His Asp Leu Gln Asn Gln Arg Leu Pro Gly Gly Leu Thr Asp Ser Leu
             565 . 570
Gly Asn Leu Lys Asn Leu Thr Lys Leu Ile Met Asp Asn Ile Lys Met
       580 585
Asn Glu Glu Asp Ala Ile Lys Leu Ala Glu Gly Leu Lys Asn Leu Lys
      595 600
                              605
Lys Met Cys Leu Phe His Leu Thr His Leu Ser Asp Ile Gly Glu Gly
                  615
                                    620
Met Asp Tyr Ile Val Lys Ser Leu Ser Ser Glu Pro Cys Asp Leu Glu
                 630
                                  635
Glu Ile Gln Leu Val Ser Cys Cys Leu Ser Ala Asn Ala Val Lys Ile
             645 650
Leu Ala Gln Asn Leu His Asn Leu Val Lys Leu Ser Ile Leu Asp Leu
         660 665
Ser Glu Asn Tyr Leu Glu Lys Asp Gly Asn Glu Ala Leu His Glu Leu
                       680
                                        685
Ile Asp Arg Met Asn Val Leu Glu Gln Leu Thr Ala Leu Met Leu Pro
                   695
                                     700
Trp Gly Cys Asp Val Gln Gly Ser Leu Ser Ser Leu Leu Lys His Leu
                710
                                 715
Glu Glu Val Pro Gln Leu Val Lys Leu Gly Leu Lys Asn Trp Arg Leu
             725
                              730
Thr Asp Thr Glu Ile Arg Ile Leu Gly Ala Phe Phe Gly Lys Asn Pro
       740
                           745
Leu Lys Asn Phe Gln Gln Leu Asn Leu Ala Gly Asn Arg Val Ser Ser
  755 760
Asp Gly Trp Leu Ala Phe Met Gly Val Phe Glu Asn Leu Lys Gln Leu
         775
                                    780
Val Phe Phe Asp Phe Ser Thr Lys Glu Phe Leu Pro Asp Pro Ala Leu
                790
                                795
Val Arg Lys Leu Ser Gln Val Leu Ser Lys Leu Thr Phe Leu Gln Glu
            805
                              810
Ala Arg Leu Val Gly Trp Gln Phe Asp Asp Asp Leu Ser Val Ile
                          825
Thr Gly Ala Phe Lys Leu Val Thr Ala *
                        840 841
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<210> 1121 <211> 90 <212> PRT <213> Homo sapiens

<210> 1122 <211> 129 <212> PRT <213> Homo sapiens

<400> 1122 Met Phe Leu Leu Phe Trp Phe Ile Leu Ser Glu Gly Cys Pro Leu Leu 5 10 Glu Gln Leu Asn Ile Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile Gln Ala Leu Val Arg Gly Cys Gly Gly Leu Lys Ala Leu Phe Leu Lys 40 Gly Cys Thr Gln Leu Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His 55 Cys Pro Glu Leu Val Thr Leu Asn Leu Gln Thr Cys Leu Gln Ile Thr 70 75 Asp Glu Gly Leu Ile Thr Ile Cys Arg Gly Cys His Lys Leu Gln Ser 90 Leu Cys Ala Ser Gly Cys Ser Asn Ile Thr Asp Ala Ile Leu Asn Ala 105 Leu Ser Gln Asn Cys Pro Arg Leu Ile Ile Leu Glu Val Ala Arg Cys 120 Ser 129

<210> 1123 <211> 243 <212> PRT <213> Homo sapiens

<400> 1123

55 Ala Arg Val Leu Val Asp Gly Glu Glu His Val Gly Phe Leu Lys Thr 75 Asp Gly Ser Phe Val Val His Asp Ile Pro Ser Gly Ser Tyr Val Val 90 Glu Val Val Ser Pro Ala Tyr Arg Phe Asp Pro Val Arg Val Asp Ile 100 105 110 Thr Ser Lys Gly Lys Met Arg Ala Arg Tyr Val Asn Tyr Ile Lys Thr 115 120 Ser Glu Val Val Arg Leu Pro Tyr Pro Leu Gln Met Lys Ser Ser Gly 135 140 Pro Pro Ser Tyr Phe Ile Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe 155 150 Leu Met Asn Pro Met Val Met Met Val Leu Pro Leu Leu Ile Phe 165 170 175 Val Leu Leu Pro Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg 180 185 Glu Met Glu Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro 195 200 Asp Val Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly 215 220 Lys Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys 225 230 Arg Arg * 242

<210> 1124 <211> 71 <212> PRT

<213> Homo sapiens

<210> 1125 <211> 48 <212> PRT <213> Homo sapiens

Leu Gly Pro Thr Gly Asp Arg Ala Pro Gly Lys Trp Asn Arg Ser * 35 40 45 47

<210> 1126 <211> 159 <212> PRT <213> Homo sapiens

<400> 1126 Met Phe Leu Ile Val Leu Pro Leu Glu Ser Met Ala His Gly Leu Phe 10 His Glu Leu Gly Asn Cys Leu Gly Gly Thr Ser Val Gly Tyr Ala Ile 20 25 Val Ile Pro Thr Asn Phe Cys Ser Pro Asp Gly Gln Pro Thr Leu Leu 35 40 Pro Pro Glu His Val Gln Glu Leu Asn Leu Arg Ser Thr Gly Met Leu 55 60 Asn Ala Ile Gln Arg Phe Phe Ala Tyr His Met Ile Glu Thr Tyr Gly Cys Asp Tyr Ser Thr Ser Gly Leu Ser Phe Asp Thr Leu His Ser Lys 85 90 Leu Lys Ala Phe Leu Glu Leu Arg Thr Val Asp Gly Pro Arg His Asp 100 110 105 Thr Tyr Ile Leu Tyr Tyr Ser Gly His Thr His Gly Thr Gly Glu Trp 120 125 Ala Leu Ala Gly Gly Asp Thr Leu Arg Leu Asp Thr Leu Ile Glu Trp 135 Trp Arg Glu Lys Asn Gly Ser Phe Cys Ser Pro Pro Tyr Tyr Arg

<210> 1127 <211> 76 <212> PRT <213> Homo sapiens

<210> 1128 <211> 140 <212> PRT <213> Homo sapiens

<400> 1128 Met Gly Ala Gly Leu Ala Val Val Pro Leu Met Gly Leu Leu Glu Ser 10 Ile Ala Val Ala Lys Ala Phe Ala Ser Gln Asn Asn Tyr Arg Ile Asp 20 25 Ala Asn Gln Glu Leu Leu Ala Ile Gly Leu Thr Asn Met Leu Gly Ser 40 Leu Val Ser Ser Tyr Pro Val Thr Gly Ser Phe Gly Arg Thr Ala Val 55 Asn Ala Gln Ser Gly Val Cys Thr Pro Ala Glu Gly Leu Val Thr Glu 75 Val Leu Val Leu Leu Ser Leu Asp Tyr Leu Thr Ser Leu Phe Tyr Tyr 85 90 Ile Pro Lys Ser Ala Leu Ala Ala Val Ile Ile Met Ala Val Ala Pro 100 105 Leu Phe Asp Thr Lys Ile Phe Arg Thr Leu Trp Arg Val Lys Arg Leu 120 Asp Leu Leu Ser Leu Ser Val Thr Phe Leu Leu Cys 135

<210> 1129 <211> 116 <212> PRT <213> Homo sapiens

<400> 1129

Met Ala Glu Ala Phe Pro Phe Phe Ser Pro Phe Leu Gly Trp Leu Gly 10 Val Phe Leu Thr Gly Ser Asp Thr Ser Ser Asn Ala Leu Phe Ser Ser 20 25 Leu Gln Ala Thr Thr Ala His Gln Ile Gly Val Ser Asp Val Leu Leu Val Ala Ala Asn Thr Ser Gly Gly Val Thr Gly Lys Met Ile Ser Pro 55 Gln Ser Ile Ala Val Ala Cys Ala Ala Thr Gly Leu Val Gly Lys Glu 70 75 Ser Asp Leu Phe Arg Phe Thr Leu Lys His Ser Leu Phe Phe Ala Thr 90 Ile Val Gly Leu Ile Thr Leu Ala Gln Ala Tyr Trp Phe Thr Gly Met Leu Val His * 115

<210> 1130 <211> 81 <212> PRT <213> Homo sapiens

<400> 1130
Met Asn Lys Leu Leu Val Ala Ala Thr Ala Ile Leu Phe Ser Leu Gly
1 5 10 15

<210> 1131 <211> 46 <212> PRT <213> Homo sapiens

<213> Homo sapiens

<210> 1132 <211> 46 <212> PRT <213> Homo sapiens

<210> 1133 <211> 87 <212> PRT <213> Homo sapiens

50 55 60
Glu Gln Ala Arg Glu Ser Leu Leu Ser Thr Phe Arg Ile Arg Pro Arg
65 70 75 80
Gly Arg Tyr Val Ser Tyr *
85 86

<210> 1134 <211> 57 <212> PRT <213> Homo sapiens

<210> 1135 <211> 57 <212> PRT <213> Homo sapiens

<210> 1136 <211> 105 <212> PRT <213> Homo sapiens

Ala Val Pro Asp Asp Gly Thr Asp Leu Leu Pro Gln Gly Met Arg Thr 65 70 75 80

Ala Cys Thr Thr Arg Arg Ile Phe Lys Tyr Asn Thr Glu Pro Phe Ala 85 90 95

Ala Phe Leu Phe Ile Leu Asn Met *

<210> 1137 <211> 52 <212> PRT <213> Homo sapiens

<210> 1138 <211> 187 <212> PRT <213> Homo sapiens

<400> 1138 Met Gln Pro Ile Val Ala Lys Ala Leu Val Val Leu Leu Glu Val His 1 5 10 Pro Leu Gln Asp Gln Ala Glu Ser Gly Arg Leu Gly His Val His Leu 20 25 Leu Cys Ala Pro Ala Ala Leu Gln His Ala Leu Arg Gly Ile Thr Leu 40 His Asn Gly His His Gln Ala Asp His Leu Pro Asp Leu Met His His 60 Glu Ala Leu Ala Leu His Pro Asp His Arg Lys Leu Gln Ala Leu Pro 70 His Lys Gly Phe Leu Ala Val His Leu Gln Asp Val Ala Ala Gly Thr 85 90 Gly Ile Leu Arg Pro Leu Leu Arg Gly Glu Ile Val Glu Val Val Arg 105 110 Ala Leu Val Ala Gly Gln Glu Pro Val Asp Leu Leu Gln Arg Leu Gly 120 125 Ala Gln Ala Val Gly Leu Ile Leu Asn Val Pro Val Leu Val Arg Lys 135 140 Gly Lys Arg Gly Gln Gln Val Ala Ile Gly Pro Gly Ile Thr Ser Val 150 155 Leu Gly Val Lys Pro Ala Arg Asp Pro Leu Gln Ser Gln Asn Pro Asn 165 170 Val Arg Gly Lys Val Ala Val Asp Leu Phe * 180 185 186

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<210> 1139
<211> 109
<212> PRT
<213> Homo sapiens
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<400> 1139 Met Trp Gln Lys Ser Leu Leu Ile Leu Ser Phe Arg Val Ser Phe Pro 10 Leu Phe Leu Thr Tyr Asn Tyr Lys Leu Leu Ser Ile Arg Arg Thr Arg 20 . 25 Pro Leu Ser Ser Phe Phe Ser Lys Leu Leu Gln Ile Ala Val Asn Ser 40 Ile Asn Ser Leu Phe Ser Ala Gly Lys Val Ala Phe Ser Lys His Val 55 60 Cys Leu Leu Pro Gly Gly Leu Lys Ser Met Ile Tyr Cys Ser Ser Met 70 75 Cys Leu Lys Gln Leu Leu Arg Ser Phe Lys Gln Glu Ser Ser Lys Gly 85 90 Ser Val Leu Ile Met Val Leu Val Phe Leu Gln Ile 100 105

<210> 1140 <211> 83 <212> PRT <213> Homo sapiens

<210> 1141 <211> 58 <212> PRT <213> Homo sapiens

Ser Ser Lys Phe Ser Trp Lys Ser Phe Ser Lys Leu Gln Phe Leu Leu 35 40 45

Leu Leu Lys Phe Arg Tyr Met Cys Ile *
50 55 57

<210> 1142 <211> 46 <212> PRT <213> Homo sapiens

<400> 1142

<210> 1143 <211> 58 <212> PRT <213> Homo sapiens

<400> 1143

 Met Leu Trp Ala Leu Ile Arg Ala Ala Leu Ala Gln Leu His Thr Glu 1
 5
 10
 15

 Glu Pro Lys Lys Arg Lys Glu Glu Lys Met Ser Pro Ala Leu Ser Pro 20
 25
 30

 Pro Leu Pro Ser Val Pro Ile Ser Leu Gly Gln Asn Asn Arg Lys Arg 35
 40
 45

 Arg Ser His Leu Ser Leu Leu Leu Gln *
 55
 57

<210> 1144 <211> 147 <212> PRT <213> Homo sapiens

<400> 1144 Met Ala Tyr Thr Met Ile Pro Val Leu His Phe Phe Cys Cys Glu Thr 5 10 Ser Ser Leu Val Arg Thr Lys Val Val Trp Glu Ala Ile Asn Met Val 20 25 Phe Ala Lys Ser Met Asn Gly Gly Pro Asp Arg Cys Ile Ala Val Arg 40 35 Gln Val Lys Phe Leu Phe Arg Lys Val Ser Phe Ser Glu Lys Ile Asp 55 60 His Cys Pro Leu His Asp Gly Asn Ile Leu Leu Pro Gly Pro Trp Glu 70 75 Met Ala Pro Tyr Trp Gly Leu Asn Ile Ser Leu Cys His Leu Gln Phe

 Arg His Ser Ile Val Ser Leu Ala Arg Cys Ser Leu Gly Glu Gly Gln

 Ser Met Leu Trp Cys Pro Cys Leu Thr Ser Ile Ser Val Asp Met Ala

 115
 120

 120
 120

 120
 125

 Thr Leu Tyr Ile Asn Ala Ser Ser Ser Leu Ser Ser Lys Gly Lys Lys

 130
 135

 135
 146

<210> 1145 <211> 103 <212> PRT <213> Homo sapiens

<400> 1145 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Gly 5 10 Ser Val Ala Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser 20 25 Pro Gly Lys Thr Ala Ser Ile Thr Cys Ser Gly Asp Lys Leu Gly Asp 40 Lys Tyr Ala Ser Trp Tyr Gln Gln Lys Ala Gly Gln Ser Pro Val Leu 55 60 Val Ile Tyr Glu Asp Ser Arg Arg Pro Ser Gly Ile His Lys Arg Phe 70 75 Tyr Gly Ser Asn Ser Gly Thr Thr Ala Thr Leu Thr Ile Ser Gly Thr 85 90 Gln Ala Met Asp Glu Gly * 100 102

<210> 1146 <211> 77 <212> PRT <213> Homo sapiens

<210> 1147 <211> 118 <212> PRT

<213> Homo sapiens

<210> 1148 <211> 399 <212> PRT <213> Homo sapiens

115 117

<400> 1148

Met Trp Ala Ala Val Gly Gly Phe Leu Phe Ala Pro Arg Cys Phe Leu · 10 Leu Pro Trp Pro Leu Arg Ala Pro Leu Ser Ser Leu Phe Val Leu Pro 20 25 Arg Leu Leu Trp Pro Ile Pro Tyr Pro Val Leu Ala Ser Val Cys 35 40 Pro Cys Val Pro Gly Gly Arg Phe Phe Gly Pro Leu Tyr Pro Arg Asp 55 Leu Arg Leu Leu Arg Cys Val Pro Gly Glu Leu Thr Gly Ala Ala Pro 70 Arg Thr Leu Pro Gly Cys Asp Leu Asn Cys Leu Gly Leu Gly Arg Glu 85 90 Ala Ala Val Pro Arg Leu Leu Arg Leu Thr Arg Asp Pro Ala Arg Pro 105 Ser Cys Arg Thr Leu Gly Val His Ala Val Pro Arg Arg Ala Phe Gly 120 125 Phe Tyr Ala Val Pro Arg Arg Asp Pro Arg Phe Tyr Ala Val Pro Arg 135 140 Arg Val Pro Arg Leu Tyr Ala Val Pro His Pro Ala Leu Arg Val Tyr 150 155 Ala Val Pro Arg Arg Thr Phe Arg Val Tyr Ala Val Pro His Pro Ala 170 165 Leu Arg Val Tyr Ala Val Pro Arg Arg Ala Leu Gly Leu Tyr Val Val 185 190 180 Pro Gln Arg Ala Leu Arg Val Tyr Ala Val Pro Arg Arg Thr Phe Arg 195 200 205 Val Tyr Ala Val Pro His Pro Ala Leu Arg Leu Tyr Ala Val Ala Arg 215 Arg Ala Leu Arg Phe Tyr Val Val Pro Gln Arg Ala Leu Arg Val Tyr

230 235 Ala Val Pro Arg Leu Pro Gly Arg Ala Thr Phe Arg Asp Leu Arg Pro 245 250 Leu Leu Arg Leu Leu Pro Leu Gly Gly Arg Arg Val Leu Gly Leu 265 Pro Leu Ser Leu Pro Ala Gly Leu Ala Leu Arg Ala Ala Ser Arg Ala 280 285 Arg Pro Leu His Leu Leu Arg Ala Ala Cys Leu Leu Pro Ser Leu Gly 295 His Leu Gly Thr Leu Arg Gly Ser Leu Leu Gly Leu Ser Leu Ala Val 310 315 Arg Pro Pro Arg Ala Pro Arg Leu Gly Leu Arg Ala Pro Val Trp Pro 325 330 Ala Ala Ser Cys Leu Leu His Ser Gly Gly Ala Pro Arg Arg Leu Leu 340 345 350 Cys Ala Leu Ala Pro Leu Arg Pro Phe Cys Leu Pro Ala Arg Gly Ser 355 360 Trp Leu Ser Gly Ser Leu Ser Gln Arg Arg Gly Asp Leu Arg Arg Pro 375 380 Leu Gly Thr Arg Gly Asn Pro Leu Arg Leu Arg Gly Leu Gly His 395

<210> 1149 <211> 67 <212> PRT <213> Homo sapiens

<400> 1149

 Met
 Pro
 Ser
 Tyr
 Phe
 Lys
 Thr
 Cys
 Ser
 Leu
 Phe
 Thr
 Leu
 Leu
 Leu
 Ser
 Ser
 Ser
 Leu
 Phe
 Lys
 Ser
 Ser</th

<210> 1150 <211> 70 <212> PRT <213> Homo sapiens

<400> 1150

 Met
 Leu
 Val
 Ser
 Lys
 Leu
 Met
 Leu
 Gln
 Ile
 Val
 Met
 Ala
 Val
 Pro
 His

 Tyr
 Ile
 Met
 Pro
 Val
 Glu
 Met
 Lys
 Asn
 Gln
 Ser
 Leu
 Ile
 Pro
 Leu
 Leu
 Leu
 Ile
 Pro
 Leu
 Leu
 Leu
 Ile
 Pro
 Leu
 Leu

Leu Arg Lys Ala Leu * 65 69

<210> 1151

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1151

<210> 1152

<211> 64

<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 1153

<210> 1154 <211> 75

<212> PRT <213> Homo sapiens

<400> 1154

 Met
 Asp
 Ser
 Thr
 Phe
 Leu
 Ala
 Thr
 Arg
 Ala
 Val
 Arg
 Gly
 Gln
 Leu
 Tyr

 Leu
 Trp
 Ile
 Ser
 Met
 Leu
 Thr
 Ile
 Ala
 Thr
 Gly
 Lys
 Leu
 Cys
 Ala
 Arg

 Cys
 Tyr
 Pro
 Glu
 Asn
 Gln
 Asp
 His
 Ile
 Gln
 Met
 Leu
 Pro
 Cys
 Ser

 Pro
 Ala
 Ser
 Val
 Ile
 Leu
 His
 Leu
 Pro
 Trp
 Met
 Met
 Lys
 Phe
 Phe
 Leu

 Ala
 Arg
 His
 Leu
 Fro
 Glu
 Asn
 *
 60

<210> 1155 <211> 68 <212> PRT <213> Homo sapiens

<400> 1155

<210> 1156 <211> 60 <212> PRT <213> Homo sapiens

<210> 1157 <211> 776 <212> PRT

<213> Homo sapiens

<400> 1157 Met Leu Phe Ile Val Thr Ala Leu Leu Cys Cys Gly Leu Cys Asn Gly Val Leu Ile Glu Glu Thr Glu Ile Val Met Pro Thr Pro Lys Pro Glu 20 25 Leu Trp Ala Glu Thr Asn Phe Pro Leu Ala Pro Trp Lys Asn Leu Thr Leu Trp Cys Arg Ser Pro Ser Gly Ser Thr Lys Glu Phe Val Leu Leu 55 Lys Asp Gly Thr Gly Trp Ile Ala Thr Arg Pro Ala Ser Glu Gln Val Arg Ala Ala Phe Pro Leu Gly Ala Leu Thr Gln Ser His Thr Gly Ser 90 Tyr His Cys His Ser Trp Glu Glu Met Ala Val Ser Glu Pro Ser Glu 105 Ala Leu Glu Leu Val Gly Thr Asp Ile Leu Pro Lys Pro Val Ile Ser 120 Ala Ser Pro Thr Ile Arg Gly Gln Glu Leu Gln Leu Arg Cys Lys Gly 135 Trp Leu Ala Gly Met Gly Phe Ala Leu Tyr Lys Glu Gly Glu Gln Glu 150 155 Pro Val Gln Gln Leu Gly Ala Val Gly Arg Glu Ala Phe Phe Thr Ile 165 170 Gln Arg Met Glu Asp Lys Asp Glu Gly Asn Tyr Ser Cys Arg Thr His 185 Thr Glu Lys Arg Pro Phe Lys Trp Ser Glu Pro Ser Glu Pro Leu Glu 200 Leu Val Ile Lys Glu Met Tyr Pro Lys Pro Phe Phe Lys Thr Trp Ala 215 Ser Pro Val Val Thr Pro Gly Ala Arg Val Thr Phe Asn Cys Ser Thr 230 235 Pro His Gln His Met Ser Phe Ile Leu Tyr Lys Asp Gly Ser Glu Ile 245 250 Ala Ser Ser Asp Arg Ser Trp Ala Ser Pro Gly Ala Ser Ala Ala His Phe Leu Ile Ile Ser Val Gly Ile Gly Asp Gly Gly Asn Tyr Ser Cys 280 Arg Tyr Tyr Asp Phe Ser Ile Trp Ser Glu Pro Ser Asp Pro Val Glu 295 300 Leu Val Val Thr Glu Phe Tyr Pro Lys Pro Thr Leu Leu Ala Gln Pro 310 315 Gly Pro Val Val Phe Pro Gly Lys Ser Val Ile Leu Arg Cys Gln Gly 325 330 Thr Phe Gln Gly Met Arg Phe Ala Leu Leu Gln Glu Gly Ala His Val 345 Pro Leu Gln Phe Arg Ser Val Ser Gly Asn Ser Ala Asp Phe Leu Leu 360 His Thr Val Gly Ala Glu Asp Ser Gly Asn Tyr Ser Cys Ile Tyr Tyr 375 380 Glu Thr Thr Met Ser Asn Arg Gly Ser Tyr Leu Ser Met Pro Leu Met 390 395 Ile Trp Val Thr Asp Thr Phe Pro Lys Pro Trp Leu Phe Ala Glu Pro 410 Ser Ser Val Val Pro Met Gly Gln Asn Val Thr Leu Trp Cys Arg Gly Pro Val His Gly Val Gly Tyr Ile Leu His Lys Glu Gly Glu Ala Thr

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440
Ser Met Gln Leu Trp Gly Ser Thr Ser Asn Asp Gly Ala Phe Pro Ile
                     455
Thr Asn Ile Ser Gly Thr Ser Met Gly Arg Tyr Ser Cys Cys Tyr His
                  470
                                    475
Pro Asp Trp Thr Ser Ser Ile Lys Ile Gln Pro Ser Asn Thr Leu Glu
              485
                               490
Leu Leu Val Thr Gly Leu Leu Pro Lys Pro Ser Leu Leu Ala Gln Pro
                            505
Gly Pro Met Val Ala Pro Gly Glu Asn Met Thr Leu Gln Cys Gln Gly
                520
Glu Leu Pro Asp Ser Thr Phe Val Leu Leu Lys Glu Gly Ala Gln Glu
                  535
                                      540
Pro Leu Glu Gln Gln Arg Pro Ser Gly Tyr Arg Ala Asp Phe Trp Met
                550
                                   555
Pro Ala Val Arg Gly Glu Asp Ser Gly Ile Tyr Ser Cys Val Tyr Tyr
               565
                   570
Leu Asp Ser Thr Pro Phe Ala Ala Ser Asn His Ser Asp Ser Leu Glu
           580
                             585
Ile Trp Val Thr Asp Lys Pro Pro Lys Pro Ser Leu Ser Ala Trp Pro
                         600
Ser Thr Met Phe Lys Leu Gly Lys Asp Ile Thr Leu Gln Cys Arg Gly
                     615
                                        620
Pro Leu Pro Gly Val Glu Phe Val Leu Glu His Asp Gly Glu Glu Ala
                  630
                                    635
Pro Gln Gln Phe Ser Glu Asp Gly Asp Phe Val Ile Asn Asn Val Glu
              645
                               650
Gly Lys Gly Ile Gly Asn Tyr Ser Cys Ser Tyr Arg Leu Gln Ala Tyr
                            665
Pro Asp Ile Trp Ser Glu Pro Ser Asp Pro Leu Glu Leu Val Gly Ala
                         680
                                   685
Ala Gly Pro Val Ala Gln Glu Cys Thr Val Gly Asn Ile Val Arg Ser
                     695
                                        700
Ser Leu Ile Val Val Val Val Ala Leu Gly Val Val Leu Ala Ile
                 710
                                    715
Glu Trp Lys Lys Trp Pro Arg Leu Arg Thr Arg Gly Ser Glu Thr Asp
             725
                                730
Gly Arg Asp Gln Thr Ile Ala Leu Glu Glu Cys Asn Gln Glu Gly Glu
         740 745
Pro Gly Thr Pro Ala Asn Ser Pro Ser Ser Thr Ser Gln Arg Ile Ser
                        760
Val Glu Leu Pro Val Pro Ile *
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<210> 1158 <211> 80 <212> PRT <213> Homo sapiens

Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu Leu Gly Glu
50 55 60

Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr Asp Gly *
65 70 75 79

<210> 1159 <211> 132 <212> PRT <213> Homo sapiens

<400> 1159 Met Ser Ser Gly Thr Glu Leu Leu Trp Pro Gly Ala Ala Leu Leu Val Leu Leu Gly Val Ala Ala Ser Leu Cys Val Arg Cys Ser Arg Pro Gly 25 Ala Lys Arg Ser Glu Lys Ile Tyr Gln Gln Arg Ser Leu Arg Glu Asp 40 Gln Gln Ser Phe Thr Gly Ser Arg Thr Tyr Ser Leu Val Gly Gln Ala Trp Pro Gly Pro Leu Ala Asp Met Ala Pro Thr Arg Lys Asp Lys Leu 65 70 Leu Gln Phe Tyr Pro Ser Leu Glu Asp Pro Ala Ser Ser Arg Tyr Gln 85 90 Asn Phe Ser Lys Gly Ser Arg His Gly Ser Glu Glu Ala Tyr Ile Asp 105 Pro Thr Ala Ile Lys Tyr Phe Leu Thr Gln Ala Thr Ala Ser Ile Ile Leu Leu Ile Ala 130 132

<210> 1160 <211> 167 <212> PRT <213> Homo sapiens

<400> 1160 Met Val Gly Leu Gly Gly Met Ser Gln Leu Leu Leu Ala Ser Leu Leu Pro Pro Val Pro Gln Gly Ser Pro Thr Arg Arg Lys Leu Pro Ala Ser 20 25 Leu Leu Val Ser Thr Ala Leu Ile Ser Pro Val Cys Val Arg Gly Trp 40 Met Trp Gln Asn Leu Gln Asn Arg Ile His Gly Ser His Thr Ser Ala 55 60 Arg Arg Val Pro Ser Leu Pro Gly Ala Gly Gln Val Gly Val Arg Trp 70 75 Glu Ala Gly Pro Ala Cys Arg Thr Gln Pro Ser Pro Gln Asn Leu Ala 90 Pro Arg Pro His Pro Ser Ala Ala Gln Leu Ile Glu Asn Ala Ala Leu 100 105 110 Arg Ser Ala Met Ser Gly Glu Arg Leu Phe Pro Glu Gly Gln Glu His · 125 120 Leu Gly Pro Leu Val Ala Pro Arg Val Pro Met Gly Gly Ala Leu Cys

<210> 1161 <211> 84 <212> PRT <213> Homo sapiens

<210> 1162 <211> 80 <212> PRT <213> Homo sapiens

83

<210> 1163 <211> 71 <212> PRT <213> Homo sapiens

<210> 1164 <211> 56 <212> PRT <213> Homo sapiens

<210> 1165 <211> 97 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(97) <223> Xaa = any amino acid or nothing

<210> 1166 <211> 48

<212> PRT <213> Homo sapiens

<210> 1167 <211> 274 <212> PRT <213> Homo sapiens

<400> 1167 Met Glu Ala Pro Leu Ser His Leu Glu Ser Arg Tyr Leu Pro Ala His 10 Phe Ser Pro Leu Val Phe Phe Leu Leu Ser Ile Met Met Ala Cys 20 25 Cys Leu Val Ala Phe Phe Val Leu Gln Arg Gln Pro Arg Cys Trp Glu 40 Ala Ser Val Glu Asp Leu Leu Asn Asp Gln Val Thr Leu His Ser Ile 60 Arg Pro Arg Glu Glu Asn Asp Leu Gly Pro Ala Gly Thr Val Asp Ser 70 75 Ser Gln Gly Gln Gly Tyr Leu Glu Glu Lys Ala Ala Pro Cys Cys Pro 85 90 Ala His Leu Ala Phe Ile Tyr Thr Leu Val Ala Phe Val Asn Ala Leu 105 100 Thr Asn Gly Met Leu Pro Ser Val Gln Thr Tyr Ser Cys Leu Ser Tyr 115 120 125 Gly Pro Val Ala Tyr His Leu Ala Ala Thr Leu Ser Ile Val Ala Asn 130 135 Pro Leu Ala Ser Leu Val Ser Met Phe Leu Pro Asn Arg Ser Leu Leu 150 155 Phe Leu Gly Val Leu Ser Val Leu Gly Thr Cys Phe Gly Gly Tyr Asn 165 170 Met Ala Met Ala Val Met Ser Pro Cys Pro Leu Leu Gln Gly His Trp 185 190 Gly Gly Glu Val Leu Ile Val Ser Ile Arg Pro Val Ala Ser Trp Val 195 . 200 Leu Phe Ser Gly Cys Leu Ser Tyr Val Lys Val Met Leu Gly Val Val 215 Leu Arg Asp Leu Ser Arg Ser Ala Leu Leu Trp Cys Gly Ala Ala Val 230 235 Gln Leu Gly Ser Leu Leu Gly Ala Leu Leu Met Phe Pro Leu Val Asn 245 250 Val Leu Arg Leu Phe Ser Ser Ala Asp Phe Cys Asn Leu His Cys Pro 265 Ala *

667

<210> 1168 <211> 230 <212> PRT <213> Homo sapiens

<400> 1168 Met Arg Ile Cys Asn Leu Ile Ser Met Met Leu Leu Cys His Trp 10 Asp Gly Cys Leu Gln Phe Leu Val Pro Met Leu Gln Asp Phe Pro Arg Asn Cys Trp Val Ser Ile Asn Gly Met Val Asn His Ser Trp Ser Glu 35 Leu Tyr Ser Phe Ala Leu Phe Lys Ala Met Ser His Met Leu Cys Ile 55 Gly Tyr Gly Arg Gln Ala Pro Glu Ser Met Thr Asp Ile Trp Leu Thr 70 75 Met Leu Ser Met Ile Val Gly Ala Thr Cys Tyr Ala Met Phe Ile Gly 90 His Ala Thr Ala Leu Ile Gln Ser Leu Asp Ser Ser Arg Arg Gln Tyr 100 105 Gln Glu Lys Tyr Lys Gln Val Glu Gln Tyr Met Ser Phe His Lys Leu 115 120 Pro Ala Asp Phe Arg Gln Lys Ile His Asp Tyr Tyr Glu His Arg Tyr 135 140 Gln Gly Lys Met Phe Asp Glu Asp Ser Ile Leu Gly Glu Leu Asn Gly 150 155 Pro Leu Arg Glu Glu Ile Val Asn Phe Asn Cys Arg Lys Leu Val Ala 165 170 Ser Met Pro Leu Phe Ala Asn Ala Asp Pro Asn Phe Val Thr Ala Met 180 185 Leu Thr Lys Leu Lys Phe Glu Val Phe Gln Pro Gly Asp Tyr Ile Ile 195 200 205 Pro Arg Arg His His Arg Glu Glu Asp Val Leu His Pro Ala Arg Arg 210 215 Gly Gln Arg Ala His 225 229

<210> 1169 <211> 213 <212> PRT <213> Homo sapiens

<400> 1169

 Met
 Ala
 His
 Phe
 Thr
 Trp
 Ala
 His
 Leu
 Arg
 Val
 Leu
 Thr
 Leu
 Phe
 Leu

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85 90 Val Leu Met Ala Gly Ala Leu Ala Val Leu Ser Glu Gly Leu Gln Gly 100 105 Leu Asp Asp Glu Ala His Val Val Leu Ile Asp Val Glu Pro Gln Gln 115 120 125 Pro Gln Ala Ala Arg Gly Ala Ala Ala His Asp Val Gln Glu Leu Gln 135 140 Arg Leu Ala Tyr Gln Val Val Val Gly Phe Val Val Leu Thr Ala Gln 150 155 Glu Val Leu Gln Val Pro Val Val Val Leu Thr Gln Gln Leu Gln Lys 165 170 Ala Gln Asp Gly Leu His Asp Glu His Gly Cys Ala His Leu Thr Ala 185 Leu His Thr Phe Ala His Leu Val Pro Pro Ala Gln Ala Gly Ala Gln 200 Arg Val Ala Gly * 210 212

<210> 1170 <211> 51 <212> PRT <213> Homo sapiens

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<210> 1171 <211> 157 <212> PRT <213> Homo sapiens

<400> 1171 Met Leu Val Pro Leu Asn Leu Cys Leu Gln Ser Thr Leu Ala Leu Val 1 . 5 10 Ser Leu Pro Leu Pro Gly Ile Gly Arg Ala Phe Cys Glu Trp Leu Ser Gly Thr Phe Lys Ala Arg Arg Gln Gly Pro Lys Ala Lys Arg Glu Leu 40 Trp Asp Val Pro Ser Pro Val Arg Gly Trp Pro Trp Gly Phe Arg Leu 55 Arg Gly Val Pro Gly Pro Val Ser Pro Ala Phe Gly Pro Phe Gly Glu 70 75 Phe Gly Glu Glu Val Pro Thr Ala Arg Pro Gly Asp Val Arg Gly Ala 90 Ala Leu Thr Phe Ile Val Gly Val Ser Ser Glu Val Ser Val Gln Arg 105

Arg Ser Ala Gly Arg Ser His Arg Gly Arg Arg Arg Arg Ala Ser Cys
115

Thr Ala Ala Pro Gly Gly Gly Val Thr Arg Arg Trp Lys Glu Tyr Cys
130

Thr Gln Arg Ile Asn Asn Leu Val Lys Pro Phe Ser *
145

150

150

155

156

<210> 1172 <211> 69 <212> PRT <213> Homo sapiens

<210> 1173 <211> 75 <212> PRT <213> Homo sapiens

<210> 1174 <211> 77 <212> PRT <213> Homo sapiens

 $^{<400>}$ 1174 Met Leu Ser Ser Phe Phe Lys Ser Cys Phe Cys Val Ser Phe Trp Thr 1 5 10 15 Leu Ser Ile Ala Thr Ser Ser Asn Leu Leu Ile Phe Ser Ser Ala Ile

20 25 30

Ser Asn Leu Leu Leu Ile Leu Ser Ser Val Phe Ser Ile Leu Asp Ile
35 40 45

Val Val Phe Ile Thr Arg Ser Met Ile Trp Phe Cys Phe His Pro Cys
50 55 60

Ile Tyr Ile Thr Cys Pro Val Phe His Ser Ala Ser *
65 70 75 76

<210> 1175 <211> 59 <212> PRT <213> Homo sapiens

<210> 1176 <211> 55 <212> PRT <213> Homo sapiens

<210> 1177 <211> 86 <212> PRT <213> Homo sapiens

Ser Trp Val Arg Thr Ala Trp Met Leu Gly Ser Thr Ser Arg Thr Arg
50

Gly Leu Ser Arg Leu Trp Leu Thr Val Thr Ala Val Met Pro Pro Met
65

70

75

80

Pro Leu Ala Pro Pro *

<210> 1178 <211> 189 <212> PRT <213> Homo sapiens

<400> 1178 Met Met Pro Leu Leu Ser Leu Ile Phe Ser Ala Leu Phe Ile Leu Phe 1 5 10 Gly Thr Val Ile Val Gln Ala Phe Ser Asp Ser Asn Asp Glu Arg Glu 25 Ser Ser Pro Pro Glu Lys Glu Glu Ala Gln Glu Lys Thr Gly Lys Thr 40 Glu Pro Ser Phe Thr Lys Glu Asn Ser Ser Lys Ile Pro Lys Lys Gly 55 Phe Val Glu Val Thr Glu Leu Thr Asp Val Thr Tyr Thr Ser Asn Leu 70 75 Val Arg Leu Arg Pro Gly His Met Asn Val Val Leu Ile Leu Ser Asn 85 90 Ser Thr Lys Thr Ser Leu Leu Gln Lys Phe Ala Leu Glu Val Tyr Thr 100 105 Phe Thr Gly Ser Ser Cys Leu His Phe Ser Phe Leu Ser Leu Asp Lys 115 120 125 His Arg Glu Trp Leu Glu Tyr Leu Leu Glu Phe Ala Gln Asp Ala Ala 130 135 140 Pro Ile Pro Asn Gln Tyr Asp Lys His Phe Met Glu Arg Asp Tyr Thr 145 · 150 155 Gly Tyr Val Leu Ala Leu Asn Gly His Lys Lys Tyr Phe Cys Leu Phe 165 170 Lys Pro Gln Lys Thr Val Glu Glu Gly Gly Lys Pro * 180 185

<210> 1179 <211> 55 <212> PRT <213> Homo sapiens

<210> 1180 <211> 81 <212> PRT <213> Homo sapiens

<400> 1180

 Met Ala
 Phe Leu Leu Ser Thr Leu Leu Asn His Tyr Leu Ala Cys Lys 1
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 His Ser Ser Ser Glu Leu Trp Leu Gln Ser Ser Leu Asn Asn Leu Gly Lys 20
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<210> 1181 <211> 69 <212> PRT <213> Homo sapiens

<400> 1181

<210> 1182 <211> 430 <212> PRT <213> Homo sapiens

<400> 1182

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Ala Lys Val Val Lys Ala Ser Ser Pro Ser Tyr Leu Ala Glu Gly Lys
                    70
                                        75
Ile Arg Cys Leu Ala Gln Pro His Pro Gly Thr Gly Val Pro Arg Ala
                85
                                    90
Ala Ala Glu Leu Pro Leu Glu Ala Glu Lys Ile Lys Thr Gly Thr Gln
           100
                               105
Lys Gln Ala Lys Thr Asp Met Ala Phe Lys Thr Ser Val Ala Val Glu
                            120
                                               125
Met Ala Gly Ala Pro Ser Trp Thr Lys Val Ala Glu Glu Gly Asp Lys
                        135
                                            140
Pro Pro His Gly Pro Arg Cys Pro Asn His Ala Cys Gln Arg Leu Gly
                    150
Gly Leu Ser Ala Pro Pro Trp Ala Lys Pro Glu Asp Arg Gln Thr Gln
               165
                                   170
Pro Gln Pro His Gly His Val Pro Gly Lys Thr Thr Gln Gly Gly Pro
                               185
Cys Pro Ala Ala Cys Glu Val Gln Gly Met Leu Val Pro Pro Met Ala
                           200
Pro Thr Gly His Ser Thr Cys Asn Val Glu Ser Trp Gly Asp Asn Gly
                    215
Ala Thr Arg Ala Gln Pro Ser Met Pro Gly Gln Ala Val Pro Cys Gln
                  230
                                       235
Glu Asp Thr Val Gly Ser Leu Leu Ala Ser Leu Cys Ala Glu Val Ala
               245
                                   250
Gly Val Leu Ala Ser Gln Glu Asp Leu Arg Thr Leu Leu Ala Lys Ala
                               265
Leu Ser Gln Gly Glu Val Trp Ala Ala Leu Asn Gln Ala Leu Ser Lys
       275
                            280
                                               285
Glu Val Leu Gly Ala Thr Val Thr Lys Ala Leu Pro Gln Ser Met Leu
                       295
                                           300
Ser Met Ala Leu Val Lys Ala Leu Ser Trp Ser Glu Leu Arg Leu Thr
                    310
                                       315
Leu Ser Arg Ala Leu Ser Arg Gly Glu Leu Arg Ala Glu Leu Thr Lys
               325
                                   330
Val Met Gln Gly Lys Leu Ala Glu Val Leu Ser Lys Ala Leu Thr Glu
           340
                               345
Glu Glu Trp Val Ala Leu Ser Gln Ala Leu Cys Gln Gly Glu Leu Gly
       355
                           360
                                               365
Ala Leu Leu Ser Gln Ser Trp Cys Arg Val Ala Leu Arg Thr Gly Thr
                       375
                                           380
Ile Leu Pro Lys Ala Ala Ser Lys Ser Thr Gly Ser Gly Val Thr Lys
                   390
                                       395
Thr Pro Ala Leu Val Lys Val Ala Cys Arg Arg Ser Pro Ser Ala Ala
              405
                                   410
Trp Gly Pro Ser Leu Gly Pro Val Arg Pro Gln Thr Ser Lys
           420
                               425
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<210> 1183 <211> 53 <212> PRT <213> Homo sapiens

<400> 1183

Met Thr Phe Ile Leu Ser Arg Pro Pro Phe Phe Phe Leu Phe Ser Lys

1 5 10 15

Arg Ser Cys Ser Gly Ala Arg Trp Ser Arg Trp Pro Gln Phe Gly Tyr

20 25 30

Ser Thr Ser Pro Pro Gly Ser Met Phe Phe Ser Ser Pro Pro Ser Arg
35 40 45

Gly Ile Pro Ala *
50 52

<210> 1184 <211> 56 <212> PRT <213> Homo sapiens

<210> 1185 <211> 294 <212> PRT <213> Homo sapiens

<400> 1185 Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu 10 Leu Val Ala Glu Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala 25 Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu Leu 40 Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu 55 Gly Val Lys Ala Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr 65 · 70 Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg 85 90 Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe 105 Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys 120 125 Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe 135 140 Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro 150 155 Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser 165 170 Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu 185 Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala 200

<210> 1186 <211> 57 <212> PRT <213> Homo sapiens

<210> 1187 <211> 191 <212> PRT <213> Homo sapiens

<400> 1187

Met Asp Leu Asp Asn Ala Lys Tyr Ser Leu Leu Gly Phe Ala Leu Phe 5 10 Trp Val Val Gly Phe Phe Phe Val Cys Leu Phe Trp Phe Leu Val 20 25 Phe Leu Pro Trp Cys Lys Thr Val Glu Ser Cys Leu Phe Thr Gly Leu 40 Gly Ser Ile Glu Val Cys Val Ser Ser Val Arg Phe Leu Leu Arg Thr 55 Ile Cys Ile Phe Asn Asn Ser Thr Ser Ser Arg Pro Ser Arg Arg Asn 70 75 Glu Arg Gly Leu Val Ser Ser Pro Glu Leu Ala Leu Glu Cys Val His 85 90 Leu Ala Ala His Gly Leu Val Ala Leu Arg Gly Leu Ile Gln Leu Pro 105 Leu Gln Leu Pro Ala Val Gly Val Asp Ala Leu Gly Leu Leu Cys 120 125 Leu Leu Gln Leu Pro Leu Glu Leu Leu Asp Pro Gly Ile Ala Phe Leu 135 140 Cys Leu Leu Val Leu Leu Gly His Leu Ala Leu Val Leu His Leu

<210> 1188 <211> 216 <212> PRT <213> Homo sapiens

<400> 1188 Met Ser Pro Pro Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu 10 Leu Asn Val Glu Pro Ala Gly Ala Thr Leu Ile Arg Ile Pro Leu Arg 20 25 Gln Val His Pro Gly Arg Arg Thr Leu Asn Leu Leu Arg Gly Trp Gly 40 Lys Pro Ala Glu Leu Pro Lys Leu Gly Ala Pro Ser Pro Gly Asp Lys 55 Pro Ala Ser Val Pro Leu Ser Lys Phe Leu Asp Ala Gln Tyr Phe Gly 70 75 Glu Ile Gly Leu Gly Thr Pro Pro Gln Asn Phe Thr Val Ala Phe Asp 85 90 Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Arg Arg Cys His Phe Phe 100 105 110 Ser Val Pro Cys Trp Phe His His Arg Phe Asn Pro Asn Ala Ser Ser 120 125 Ser Phe Lys Pro Ser Gly Thr Lys Phe Ala Ile Gln Tyr Gly Thr Gly 135 Arg Val Asp Gly Ile Leu Ser Glu Asp Lys Leu Thr Ile Gly Gly Ile 150 155 Lys Gly Ala Ser Val Ile Phe Gly Glu Ala Leu Trp Gly Ile Gln Pro 165 170 Gly Ser Ser Leu Phe Pro Ala Pro Met Gly Tyr Trp Gly Leu Gly Phe - 180 185 Pro Ile Leu Val Leu Trp Glu Gly Ile Ser Ala Pro Ala Gly Cys Thr 200 Gly Gly Ala Gly Ala Ile Gly *

<210> 1189 <211> 176 <212> PRT <213> Homo sapiens

Ala Leu Ala Ala Val Pro Ser Met Thr Gln Leu Leu Gly Asp Pro 55 Gln Ala Gly Ile Arg Arg Asn Val Ala Ser Ala Leu Gly Asn Leu Gly Pro Glu Gly Leu Gly Glu Glu Leu Leu Gln Cys Glu Val Pro Gln Arg 90 Leu Leu Glu Met Ala Cys Gly Asp Pro Gln Pro Asn Val Lys Glu Ala 100 105 Ala Leu Ile Ala Leu Arg Ser Leu Gln Gln Glu Pro Gly Ile His Gln 120 125 Val Leu Val Ser Leu Gly Ala Ser Glu Lys Leu Ser Leu Leu Ser Leu 135 140 Gly Asn Gln Ser Leu Pro His Ser Ser Pro Arg Pro Ala Ser Ala Lys 150 155 His Cys Arg Lys Leu Ile His Leu Leu Arg Pro Ala His Ser Met * 165 170

<210> 1190 <211> 58 <212> PRT <213> Homo sapiens

<210> 1191 <211> 88 <212> PRT <213> Homo sapiens

<400> 1191

Met Gly Ile Cys Leu Thr Trp Lys Pro Pro Thr Gly Val Ser Val Ile 5 Leu Ile Leu Leu Ser Glu Leu His Met Lys Ser Pro Gly Arg Leu Lys 20 25 30 Pro Lys Ser Ser Pro His Phe Ser Thr Val Leu Thr Pro Leu Thr Phe 40 Met Tyr Pro Gly Leu Ala Leu Leu His Ser Leu Tyr Trp His Trp Gln 55 60 Glu Asn Gly Glu Ile Leu Cys Arg Ala Ala Glu Pro Lys Phe Ala Gln 70 Glu Ser Lys Cys Thr Ile Tyr 85 87

<210> 1192 <211> 136 <212> PRT <213> Homo sapiens

<400> 1192 Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr 10 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr 25 Arg Pro Arg Phe Leu Glu Tyr Ser Thr Ser Glu Cys His Phe Phe Asn 35 40 Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu 55 60 Glu Asn Val Arg Phe Asp Ser Asp Val Gly Glu Phe Arg Ala Val Thr 70 75 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu 90 Leu Gly Thr Ala Arg Arg Thr Ser Trp Ser Arg Ser Gly Ala Gly Trp 105 Thr Thr Thr Ala Asp Thr Thr Thr Gly Leu Trp Arg Ala Ser Gln Cys Ser Gly Glu Ser Ile Leu Arg 135

<210> 1193 <211> 99 <212> PRT <213> Homo sapiens

<210> 1194 <211> 50 <212> PRT <213> Homo sapiens

<400> 1194

 Met
 Phe
 Ser
 Pro
 Ser
 Phe
 Gln
 Gly
 Ile
 Thr
 Lys
 Val
 Arg
 Cys
 Val

 1
 5
 10
 15

 Cys
 Val
 Ser
 Leu
 Cys
 Val
 Cys
 Val</td

<210> 1195 <211> 58 <212> PRT <213> Homo sapiens

<210> 1196 <211> 132 <212> PRT <213> Homo sapiens

<400> 1196 Met Leu Pro Asn Ser Ser Ser Leu Trp Leu Val Met Arg Ile Leu Ile Phe Cys Val Ile Pro Ala Gly Gly Val Leu Gly Ala Pro Thr Ala Ala 20 25 Gly Leu Arg Pro Thr Gly Asp Val Ala Leu Arg Arg Pro Ala Gly Ser 40 Val Glu Pro Ser Gly Ser Arg Gly Leu Arg Ala Ser Val Cys Gln Arg 55 60 Leu Ser Met Phe Leu Ala His Phe Leu Arg Gly His Phe Leu Trp Trp · 70 75 Ile Leu Asp Gly Gln Arg Leu Gly Phe Pro Leu Ser Leu Ala Thr Trp 85 90 Asn Arg Arg Lys Lys Ser Leu Gln His Leu Leu His Lys His Val Leu 100 105 Pro Val Arg Arg His Ala Gly Pro Cys Arg Gly Pro Gln Thr Thr Ala 115 120 Arg Gly Pro Arg 130 132

<210> 1197 <211> 64

<212> PRT <213> Homo sapiens

<210> 1198 <211> 53 <212> PRT <213> Homo sapiens

<210> 1199
<211> 50
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1)...(50)
<223> Xaa = any amino acid or nothing

<210> 1200 <211> 49 <212> PRT

<213> Homo sapiens

<210> 1201 <211> 46 <212> PRT <213> Homo sapiens

<210> 1202
<211> 332
<212> PRT
<213> Homo sapiens

<400> 1202

Met Pro Leu Pro Trp Ser Leu Ala Leu Pro Leu Leu Leu Ser Trp Val 10 Ala Gly Gly Phe Gly Asn Ala Ala Ser Ala Arg His His Gly Leu Leu 20 25 Ala Ser Ala Arg Gln Pro Gly Val Cys His Tyr Gly Thr Lys Leu Ala 40 Cys Cys Tyr Gly Trp Arg Arg Asn Ser Lys Gly Val Cys Glu Ala Thr 55 60 Cys Glu Pro Gly Cys Lys Phe Gly Glu Cys Val Gly Pro Asn Lys Cys 70 75 Arg Cys Phe Pro Gly Tyr Thr Gly Lys Thr Cys Ser Gln Asp Val Asn 90 Glu Cys Gly Met Lys Pro Arg Pro Cys Gln His Arg Cys Val Asn Thr 105 110 His Gly Ser Tyr Lys Cys Phe Cys Leu Ser Gly His Met Leu Met Pro 115 120 Asp Ala Thr Cys Val Asn Ser Arg Thr Cys Ala Met Ile Asn Cys Gln 135 140 Tyr Ser Cys Glu Asp Thr Glu Glu Gly Pro Gln Cys Leu Cys Pro Ser 150 155 Ser Gly Leu Arg Leu Ala Pro Asn Gly Arg Asp Cys Leu Asp Ile Asp

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170
Glu Cys Ala Ser Gly Lys Val Ile Cys Pro Tyr Asn Arg Arg Cys Val
                               185
           180
Asn Thr Phe Gly Ser Tyr Tyr Cys Lys Cys His Ile Gly Phe Glu Leu
                           200
Gln Tyr Ile Ser Gly Arg Tyr Asp Cys Ile Asp Ile Asn Glu Cys Thr
                      215
                                          220
Met Asp Ser His Thr Cys Ser His His Ala Asn Cys Phe Asn Thr Gln
                   230
                                       235
Gly Ser Phe Lys Cys Lys Cys Lys Gln Gly Tyr Lys Gly Asn Gly Leu
               245
                                  250
Arg Cys Ser Ala Ile Pro Glu Asn Ser Val Lys Glu Val Leu Arg Ala
          260
                              265
Pro Gly Thr Ile Lys Asp Arg Ile Lys Lys Leu Leu Ala His Lys Asn
                           280 -
Ser Met Lys Lys Lys Ala Lys Ile Lys Asn Val Thr Pro Glu Pro Thr
                       295
                                           300
Arg Thr Pro Thr Pro Lys Val Asn Leu Gln Pro Phe Asn Tyr Glu Glu
                   310
                                       315
Ile Val Ser Arg Gly Gly Asn Ser His Gly Gly
               325
                                   330 331
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<210> 1203 <211> 825 <212> PRT <213> Homo sapiens

<400> 1203

Met Ala Arg Leu Gly Asn Cys Ser Leu Thr Trp Ala Ala Leu Ile Ile Leu Leu Pro Gly Ser Leu Glu Clu Cys Gly His Ile Ser Val Ser 25 Ala Pro Ile Val His Leu Gly Asp Pro Ile Thr Ala Ser Cys Ile Ile Lys Gln Asn Cys Ser His Leu Asp Pro Glu Pro Gln Ile Leu Trp Arg Leu Gly Ala Glu Leu Gln Pro Gly Gly Arg Gln Gln Arg Leu Ser Asp 70 75 Gly Thr Gln Glu Ser Ile Ile Thr Leu Pro His Leu Asn His Thr Gln 85 90 Ala Phe Leu Ser Cys Cys Leu Asn Trp Gly Asn Ser Leu Gln Ile Leu 105 Asp Gln Val Glu Leu Arg Ala Gly Tyr Pro Pro Ala Ile Pro His Asn 120 Leu Ser Cys Leu Met Asn Leu Thr Thr Ser Ser Leu Ile Cys Gln Trp 135 140 Glu Pro Gly Pro Glu Thr His Leu Pro Thr Ser Phe Thr Leu Lys Ser 150 155 Phe Lys Ser Arg Gly Asn Cys Gln Thr Gln Gly Asp Ser Ile Leu Asp 170 Cys Val Pro Lys Asp Gly Gln Ser His Cys Cys Ile Pro Arg Lys His 185 Leu Leu Leu Tyr Gln Asn Met Gly Ile Trp Val Gln Ala Glu Asn Ala 200 Leu Gly Thr Ser Met Ser Pro Gln Leu Cys Leu Asp Pro Met Asp Val

Val 225		Leu	Glu	Pro	230		. Leu	a Arg	Thr	Met 235		Pro	Se:	Pro	Glu 240
Ala	Ala	Pro	Pro	Glr 245		Gly	r Cys	Leu	Glr 250		г Суя	Tr	Gli	259	Trp
			260)				265	;				270)	Pro
		275					280)				285	5		ı Glu
	290	-				295	;				300)		_	Thr
305				-	310					315	;				Asp 320
				325					330)				335	
			340)				345	i		_		350	1	Val
		355					360					365	;		, Ile . Ile
	370					375					380		_		l lie l Pro
385					390					395					400
				405					410					415	
ser	Arg	Pro	420		vaı	vaı	Pne	Ser 425		Ser	Arg	GIĀ	Pro 430		Leu
		435					440					445	_		Gly
Trp	Glu 450	Pro	Pro	Asn	Pro	Trp 455		Gln	Gly	Tyr	Val 460	Ile	Glu	Trp	Gly
465					470					475			_		Glu 480
				485					490					495	Pro
			500	Glu				505					510		
		515		His			520					525			•
	530			Leu		535					540				-
545					550					555					Thr 560
				Phe 565					570			:		5.75	•
			580					585				_	590		Pro
		595		His			600					605		_	
	610			Val		615	_				620				
625				Ser	630					635					640
				Cys 645					650					655	_
			660	Arg				665					670		
		675		Arg			680					685			
Val	Ala	Ser	Pro	Leu	Trp	Ser	Arg	Pro	Met	Cas	Ser	Arg	Gly	Thr	Gln

695 Glu Gln Phe Pro Pro Ser Pro Asn Pro Ser Leu Ala Pro Ala Ile Arg 710 715 Ser Phe Met Gly Ser Cys Trp Ala Ala Pro Gln Ala Gln Gly Gln Gly 725 730 Thr Ile Ser Ala Val Thr Pro Leu Ser Pro Ser Trp Arg Ala Ser Pro 740 745 Pro Ala Pro Ser Pro Met Arg Thr Ser Gly Ser Arg Pro Ala Pro Trp 760 Gly Pro Leu Val Thr Pro Ser Pro Lys Ser Gln Glu Asp Asp Cys Val 775 780 Phe Gly Pro Leu Leu Asn Phe Pro Pro Ser Cys Arg Gly Ser Gly Ser 790 795 Met Gly Trp Arg Arg Trp Gly Ala Ser Arg Ala Ser Leu Gly Phe Pro 805 Ser Trp Ala Cys Leu Leu Lys Ala * 824 820

<210> 1204 <211> 48 <212> PRT <213> Homo sapiens

<210> 1205 <211> 46 <212> PRT <213> Homo sapiens

<210> 1206 <211> 88 <212> PRT <213> Homo sapiens

<400> 1206

 Met
 Gln
 Trp
 Cys
 Asn
 Leu
 Thr
 Ala
 Thr
 Ser
 Ala
 Phe
 Gln
 Ile
 Glu
 Ala
 Ile
 Ile</th

<210> 1207 <211> 186 <212> PRT <213> Homo sapiens

<400> 1207 Met Ile Leu Asn Lys Ala Leu Met Leu Gly Ala Leu Ala Leu Thr Thr 5 10 Val Met Ser Pro Cys Gly Gly Glu Asp Ile Val Ala Asp His Val Ala 20 25 Ser Tyr Gly Val Asn Leu Tyr Gln Ser Tyr Gly Pro Ser Gly Gln Tyr 40 Ser His Glu Phe Asp Gly Asp Glu Glu Phe Týr Val Asp Leu Glu Arg 55 Lys Glu Thr Val Trp Gln Leu Pro Leu Phe Arg Arg Phe Arg Arg Phe 70 75 Asp Pro Gln Phe Ala Leu Thr Asn Ile Ala Val Leu Lys His Asn Leu 90 Asn Ile Val Ile Lys Arg Ser Asn Ser Thr Ala Ala Thr Asn Glu Val 105 Pro Glu Val Thr Val Phe Ser Lys Ser Pro Val Thr Leu Gly Gln Pro 115 120 Asn Thr Leu Ile Cys Leu Val Asp Asn Ile Phe Pro Pro Val Val Asn 135 140 Ile Thr Trp Leu Ser Asn Gly His Ser Val Thr Glu Gly Val Ser Glu 150 155 Thr Arg Pro Ser Ser Pro Lys Ser Asp His Phe Leu Leu Gln Asp Gln 165 170 Val Thr Ser Pro Ser Phe Pro Phe Glu * 185

<210> 1208 <211> 46 <212> PRT <213> Homo sapiens

20 25 30
Pro Ser Ser Arg Met Trp Lys Ser Ile Ile Phe Phe Leu *
35 40 45

<210> 1209 <211> 199 <212> PRT <213> Homo sapiens

<400> 1209 Met Ala Leu Leu Val Pro Leu Ala Leu Leu Val Ile Gln Ala His Leu 5 10 Val Leu Ser Val Gln Leu Glu Arg Val Val Thr Glu Glu Lys Val Ala 20 25 Leu Leu Ala Leu Leu Val Leu Pro Val Leu Leu Val Pro Glu Val Leu 40 Leu Val Leu Lys Ala His Val Val Thr Lys Val Lys Gln Val Asn Val 60 55 Glu Leu Leu Ala Ser Lys Asp Ile Glu Asp Ser Leu Val Ile Gln Val 70 75 Pro Gln Val Leu Gln Ala Leu Leu Val Ser Arg Val Gln Ser Ala Val 85 90 Gln Asp Leu Gln Ala Pro Glu Asp Leu Leu Asp Pro Val Asp Leu Leu 100 105 Ala Lys Met Glu Pro Val Asp Ile Gln Val Pro Leu Asp His Gln Gly 115 120 125 Leu Glu Val Thr Glu Val Lys Glu Asp Leu Arg Ala Pro Gln Ala Thr 135 140 Gln Gly Asn Gln Ala Leu Leu Asp Leu Leu Val Pro Leu Val Leu Ala 150 155 Val Val Leu Glu Pro Leu Pro Leu Gly Leu Glu Val Lys Lys 165 170 Leu Ala Val Leu Pro Arg Ile Met Glu Met Asn Gln Trp Ile Ser Lys 185 190 Ser Thr Pro Met Arg Leu * 195 198

<210> 1210 <211> 59 <212> PRT <213> Homo sapiens

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<210> 1211
<211> 227
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1)...(227)
<223> Xaa = any amino acid or nothing
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<400> 1211 Met Ala Ser Ile Cys Ser Trp Arg Val Met Leu Ala Trp Ala Ala Cys . 10 Trp Val Arg Ala His Ala Ala Leu Ser Gly His Pro Arg Ser Thr Phe 25 Ser Leu Trp Leu Ser Gly Ile Ser Leu Pro Xaa Pro Ile Phe Leu Pro 35 40 - 45 Met Ala Val Ser Leu Leu Thr Pro Lys Asp Val Lys Tyr Ala Arg Ser 55 Pro Asn Cys Phe Lys Ala Ala Leu Asn Ile Pro Asp Pro Gly Ala Val 70 His Leu Ile Ile Ala Leu Leu Leu Thr Asp Gly Ala Ile Pro Leu Leu 85 90 Gln Pro Ala Arg Val Lys Lys Ser Asn Ala His Val Phe Leu His Phe 100 105 110 Ala Gly Gly Asp Leu Leu Pro Ser Asm Gly Gly His Lys Ile Leu Ile 120 125 Trp Ser Arg Gly Trp Arg Gln Gly Leu Gly Gly Phe Gly Ile Ile Ile 135 Leu Ala Asp Asn Asp Leu Val Trp Ser Trp Gly Gln Ser Trp Arg His 150 155 Gly Cys Leu Leu Gly Val Gly Ala Leu Ser Ala Leu Leu Leu His His 165 170 Leu Asn Pro His Pro Tyr Leu Val Leu Gly Cys Pro Gly Pro Ala Gly 180 185 190 Lys Glu Ala Pro Pro Pro Ser Pro Val Cys His Pro Pro His Gln Thr 200 195 205 Arg Pro Pro Ser Gln Leu Pro His Ser Pro Gln Thr Phe His Ser Ala 210 215 220 Pro Glu * 225 226

<210> 1212
<211> 62
<212> PRT
<213> Homo sapiens

<400> 1212

50 55 60 61

<210> 1213 <211> 55 <212> PRT <213> Homo sapiens

<400> 1213

<210> 1214 <211> 642 <212> PRT <213> Homo sapiens

<400> 1214

10 Leu Asp Thr Glu Val Phe Val Thr Gly Gln Ser Pro Thr Pro Ser Pro 25 Thr Asp Ala Tyr Leu Asn Ala Ser Glu Thr Thr Thr Leu Ser Pro Ser 40 Gly Ser Ala Val Ile Ser Thr Thr Thr Ile Ala Thr Thr Pro Ser Lys 55 Pro Thr Cys Asp Glu Lys Tyr Ala Asn Ile Thr Val Asp Tyr Leu Tyr 75 Asn Lys Glu Thr Lys Leu Phe Thr Ala Lys Leu Asn Val Asn Glu Asn 85 90 Val Glu Cys Gly Asn Asn Thr Cys Thr Asn Asn Glu Val His Asn Leu 1.00 105 Thr Glu Cys Lys Asn Ala Ser Val Ser Ile Ser His Asn Ser Cys Thr 120 125 Ala Pro Asp Lys Thr Leu Ile Leu Asp Val Pro Pro Gly Val Glu Lys 135 140 Phe Gln Leu His Asp Cys Thr Gln Val Glu Lys Ala Asp Thr Thr Ile 150 155 Cys Leu Lys Trp Lys Asn Ile Glu Thr Phe Thr Cys Asp Thr Gln Asn 165 170 Ile Thr Tyr Arg Phe Gln Cys Gly Asn Met Ile Phe Asp Asn Lys Glu 185 Ile Lys Leu Glu Asn Leu Glu Pro Glu His Glu Tyr Lys Cys Asp Ser 200 Glu Ile Leu Tyr Asn Asn His Lys Phe Thr Asn Ala Ser Lys Ile Ile 220 Lys Thr Asp Phe Gly Ser Pro Gly Glu Pro Gln Ile Ile Phe Cys Arg 230 235

Met Thr Met Tyr Leu Trp Leu Lys Leu Leu Ala Phe Gly Phe Ala Phe

```
Ser Glu Ala Ala His Gln Gly Val Ile Thr Trp Asn Pro Pro Gln Arg
               245
                                   250
 Ser Phe His Asn Phe Thr Leu Cys Tyr Ile Lys Glu Thr Glu Lys Asp
                              265
           260
 Cys Leu Asn Leu Asp Lys Asn Leu Ile Lys Tyr Asp Leu Gln Asn Leu
                           280
 Lys Pro Tyr Thr Lys Tyr Val Leu Ser Leu His Ala Tyr Ile Ile Ala
                      295
Lys Val Gln Arg Asn Gly Ser Ala Ala Met Cys His Phe Thr Thr Lys
                   310
                                      315
 Ser Ala Pro Pro Ser Gln Val Trp Asn Met Thr Val Ser Met Thr Ser
               325
                             330 335
Asp Asn Ser Met His Val Lys Cys Arg Pro Pro Arg Asp Arg Asn Gly
        340
                             345
                                                 350
Pro His Glu Arg Tyr His Leu Glu Val Glu Ala Gly Asn Thr Leu Val
                           360
Arg Asn Glu Ser His Lys Asn Cys Asp Phe Arg Val Lys Asp Leu Gln
                       375
 Tyr Ser Thr Asp Tyr Thr Phe Lys Ala Tyr Phe His Asn Gly Asp Tyr
                   390
                                      395
Pro Gly Glu Pro Phe Ile Leu His His Ser Thr Ser Tyr Asn Ser Lys
                405
                                  410
Ala Leu Ile Ala Phe Leu Ala Phe Leu Ile Ile Val Thr Ser Ile Ala
                              425
Leu Leu Val Val Leu Tyr Lys Ile Tyr Asp Leu His Lys Lys Arg Ser
                           440
Cys Asn Leu Asp Glu Gln Glu Leu Val Glu Arg Asp Asp Glu Lys
                      455
                                          460
Gln Leu Met Asn Val Glu Pro Ile His Ala Asp Ile Leu Leu Glu Thr
                   470
                                      475
Tyr Lys Arg Lys Ile Ala Asp Glu Gly Arg Leu Phe Leu Ala Glu Phe
               485
                                  490
Gln Ser Ile Pro Arg Val Phe Ser Lys Phe Pro Ile Lys Glu Ala Arg
           500
                              505
Lys Pro Phe Asn Gln Asn Lys Asn Arg Tyr Val Asp Ile Leu Pro Tyr
                          520
                                             525
Asp Tyr Asn Arg Val Glu Leu Ser Glu Ile Asn Gly Asp Ala Gly Ser
                      535
                                         540
Asn Tyr Ile Asn Ala Ser Tyr Ile Asp Gly Phe Lys Glu Pro Arg Lys
                                      555
                   550
Tyr Ile Ala Ala Gln Gly Pro Arg Asp Glu Thr Val Asp Asp Phe Trp
         · 565
                                 570
Arg Met Ile Trp Glu Gln Lys Ala Thr Val Ile Val Met Val Thr Arg
           580
                              585
Cys Glu Glu Gly Asn Arg Asn Lys Cys Ala Glu Tyr Trp Pro Ser Met
                          600
                                              605
Glu Glu Gly Thr Arg Ala Phe Gly Glu Cys Cys Lys Asp Leu Thr
                      615
                                         620
Lys His Lys Arg Cys Pro Arg Leu His His Ser Glu Ile Glu His Cys
625
                  630
Lys
641
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<210> 1215 <211> 85 <212> PRT <213> Homo sapiens

<210> 1216 <211> 403 <212> PRT <213> Homo sapiens

<400> 1216 Met Ala Ser Val Val Leu Pro Ser Gly Ser Gln Cys Ala Ala Ala Ala 10 Ala Ala Ala Pro Pro Gly Leu Arg Leu Arg Leu Leu Leu Leu Phe Ser Ala Ala Ala Leu Ile Pro Thr Gly Asp Gly Gln Asn Leu Phe 40 Thr Lys Asp Val Thr Val Ile Glu Gly Glu Val Ala Thr Ile Ser Cys 55 60 Gln Val Asn Lys Ser Asp Asp Ser Val Ile Gln Leu Leu Asn Pro Asn 70 75 Arg Gln Thr Ile Tyr Phe Arg Asp Phe Arg Pro Leu Lys Asp Ser Arg Phe Gln Leu Leu Asn Phe Ser Ser Glu Leu Lys Val Ser Leu Thr 100 105 Asn Val Ser Ile Ser Asp Glu Gly Arg Tyr Phe Cys Gln Leu Tyr Thr 120 125 Asp Pro Pro Gln Glu Ser Tyr Thr Thr Ile Thr Val Leu Val Pro Pro 135 140 Arg Asn Leu Met Ile Asp Ile Gln Lys Asp Thr Ala Val Glu Gly Glu 150 155 Glu Ile Glu Val Asn Cys Thr Ala Met Ala Ser Lys Pro Ala Thr Thr 165 170 Ile Arg Trp Phe Lys Gly Asn Thr Glu Leu Lys Gly Lys Ser Glu Val 185 190 Glu Glu Trp Ser Asp Met Tyr Thr Val Thr Ser Gln Leu Met Leu Lys 195 200 Val His Lys Glu Asp Asp Gly Val Pro Val Ile Cys Gln Val Glu His 215 220 Pro Ala Val Thr Gly Asn Leu Gln Thr Gln Arg Tyr Leu Glu Val Gln 230 235 Tyr Lys Pro Gln Val His Ile Gln Met Thr Tyr Pro Leu Gln Gly Leu 245 250 Thr Arg Glu Gly Asp Ala Leu Glu Leu Thr Cys Glu Ala Ile Gly Lys 265

Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met Pro 275 280 Gln His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn Leu Asn 295 300 Lys Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn Ile Val Gly 310 315 Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp Pro Pro Thr Thr 330 325 340 345 Thr Ile Leu Thr Ile Ile Thr Asp Ser Arg Ala Gly Glu Gly Ser 360 Ile Arg Ala Val Asp His Ala Val Ile Gly Gly Val Val Ala Val Val 375 Val Phe Ala Met Leu Cys Leu Leu Ile Ile Leu Gly Arg Tyr Phe Ala 390 Gln Thr * 402

<210> 1217 <211> 49 <212> PRT <213> Homo sapiens

<210> 1218 <211> 304 <212> PRT <213> Homo sapiens

<400> 1218 Met Ala Arg Arg Ser Arg His Arg Leu Leu Leu Leu Leu Arg Tyr 10 Leu Val Val Ala Leu Gly Tyr His Lys Ala Tyr Gly Phe Ser Ala Pro 20 25 30 Lys Asp Gln Gln Val Val Thr Ala Val Glu Tyr Gln Glu Ala Ile Leu 40 Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg Leu Glu Trp Lys 50 55 60 Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr Gln Gln Thr Leu Gln 70 75 Gly Asp Phe Lys Asn Arg Ala Glu Met Ile Asp Phe Asn Ile Arg Ile 90 Lys Asn Val Thr Arg Ser Asp Ala Gly Lys Tyr Arg Cys Glu Val Ser

100 105 Ala Pro Ser Glu Gln Gly Gln Asn Leu Glu Glu Asp Thr Val Thr Leu 120 125 Glu Val Leu Gly Asp Val His Val Leu Ala Pro Ala Val Pro Ser Cys 135 140 Glu Val Pro Ser Ser Ala Leu Ser Gly Thr Val Val Glu Leu Arg Cys 150 155 Gln Asp Lys Glu Gly Asn Pro Ala Pro Glu Tyr Thr Trp Phe Lys Asp 165 170 Gly Ile Arg Leu Leu Glu Asn Pro Arg Leu Gly Ser Gln Ser Thr Asn 185 190 . Ser Ser Tyr Thr Met Asn Thr Lys Thr Gly Thr Leu Gln Phe Asn Thr 200 Val Ser Lys Leu Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg Asn Ser 215 220 Val Gly Tyr Arg Arg Cys Pro Gly Lys Arg Met Gln Val Asp Asp Leu 230 235 Asn Ile Ser Gly Ile Ile Ala Ala Val Val Val Ala Leu Val Ile 245 250 Ser Val Cys Gly Leu Gly Val Cys Tyr Ala Gln Arg Lys Gly Tyr Phe 265 Ser Lys Glu Thr Ser Phe Gln Lys Ser Asn Ser Ser Ser Lys Ala Thr 280 Thr Met Ser Glu Asn Asp Phe Lys His Thr Lys Ser Phe Ile Ile * 295

<210> 1219 <211> 1126 <212> PRT <213> Homo sapiens

<400> 1219 Met Trp Phe Leu Phe Leu Cys Pro Asn Leu Trp Ala Met Pro Val Gln 10 Ile Ile Met Gly Val Ile Leu Leu Tyr Asn Leu Leu Gly Ser Ser Ala 20 25 Leu Val Gly Ala Ala Val Ile Val Leu Leu Ala Pro Ile Gln Tyr Phe 40 Ile Ala Thr Lys Leu Ala Glu Ala Gln Lys Ser Thr Leu Asp Tyr Ser Thr Glu Arg Leu Lys Lys Thr Asn Glu Ile Leu Lys Gly Ile Lys Leu 70 75 Leu Lys Leu Tyr Ala Trp Glu His Ile Phe Cys Lys Ser Val Glu Glu 85 90 Thr Arg Met Lys Glu Leu Ser Ser Leu Lys Thr Phe Ala Leu Tyr Thr 105 Ser Leu Ser Ile Phe Met Asn Ala Ala Ile Pro Ile Ala Ala Val Leu 120 Ala Thr Phe Val Thr His Ala Tyr Ala Ser Gly Asn Asn Leu Lys Pro 135 140 Ala Glu Ala Phe Ala Ser Leu Ser Leu Phe His Ile Leu Val Thr Pro 150 , 155 Leu Phe Leu Leu Ser Thr Val Val Arg Phe Ala Val Lys Ala Ile Ile 165 170 Ser Val Gln Lys Leu Asn Glu Phe Leu Leu Ser Asp Glu Ile Gly Asp 180 185

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Asp Ser Trp Arg Thr Gly Glu Ser Ser Leu Pro Phe Glu Ser Cys Lys
                         200
Lys His Thr Gly Val Gln Pro Lys Thr Ile Asn Arg Lys Gln Pro Gly
                       215
Arg Tyr His Leu Asp Ser Tyr Glu Gln Ser Thr Arg Arg Leu Arg Pro
                   230
                                        235
Ala Glu Thr Glu Asp Ile Ala Ile Lys Val Thr Asn Gly Tyr Phe Ser
                245
                                   250
Trp Gly Ser Gly Leu Ala Thr Leu Ser Asn Ile Asp Ile Arg Ile Pro
        260
                              265
Thr Gly Gln Leu Thr Met Ile Val Gly Gln Val Gly Cys Gly Lys Ser
                            280
                                               285
Ser Leu Leu Ala Ile Leu Gly Glu Met Gln Thr Leu Glu Gly Lys
                        295
Val His Trp Ser Asn Val Asn Glu Ser Glu Pro Ser Phe Glu Ala Thr
                    310
                                        315
Arg Ser Arg Asn Arg Tyr Ser Val Ala Tyr Ala Ala Gln Lys Pro Trp
                325
                                    330
Leu Leu Asn Ala Thr Val Glu Glu Asn Ile Thr Phe Gly Ser Pro Phe
                                345
Asn Lys Gln Arg Tyr Lys Ala Val Thr Asp Ala Cys Ser Leu Gln Pro
                            360
Asp Ile Asp Leu Leu Pro Phe Gly Asp Gln Thr Glu Ile Gly Glu Arg
                       375
                                           380
Gly Ile Asn Leu Ser Gly Gly Gln Arg Gln Arg Ile Cys Val Ala Arg
                                       395
                   390
Ala Leu Tyr Gln Asn Thr Asn Ile Val Phe Leu Asp Asp Pro Phe Ser
                405
                                   410
Ala Leu Asp Ile His Leu Ser Asp His Leu Met Gln Glu Gly Ile Leu
                                425
                                                   430
Lys Phe Leu Gln Asp Asp Lys Arg Thr Leu Val Leu Val Thr His Lys
                           440
Leu Gln Tyr Leu Thr His Ala Asp Trp Ile Ile Ala Met Lys Asp Gly
                       455
Ser Val Leu Arg Glu Gly Thr Leu Lys Asp Ile Gln Thr Lys Asp Val
                   470
                                       475
Glu Leu Tyr Glu His Trp Lys Thr Leu Met Asn Arg Gln Asp Gln Glu
               485
                                   490
Leu Glu Lys Asp Met Glu Ala Asp Gln Thr Thr Leu Glu Arg Lys Thr
           500
                               505
Leu Arg Arg Ala Met Tyr Ser Arg Glu Ala Lys Ala Gln Met Glu Asp
                           520
Glu Asp Glu Glu Glu Glu Glu Glu Asp Glu Asp Asp Asn Met Ser
                       535
                                           540
Thr Val Met Arg Leu Arg Thr Lys Met Pro Trp Lys Thr Cys Trp Arg
                   550
                                       555
Tyr Leu Thr Ser Gly Gly Phe Phe Leu Leu Ile Leu Met Ile Phe Ser
               565
                                   570
Lys Leu Leu Lys His Ser Val Ile Val Ala Ile Asp Tyr Trp Leu Ala
                               585
Thr Trp Thr Ser Glu Tyr Ser Ile Asn Asn Thr Gly Lys Ala Asp Gln
                           600
Thr Tyr Tyr Val Ala Gly Phe Ser Ile Leu Cys Gly Ala Gly Ile Phe
                       615
                                           620
Leu Cys Leu Val Thr Ser Leu Thr Val Glu Trp Met Gly Leu Thr Ala
                  630
                                      635
Ala Lys Asn Leu His His Asn Leu Leu Asn Lys Ile Ile Leu Gly Pro
               645
                                  650
Ile Arg Phe Phe Asp Thr Thr Pro Leu Gly Leu Ile Leu Asn Arg Phe
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660
                                 665
 Ser Ala Asp Thr Asn Ile Ile Asp Gln His Ile Pro Pro Thr Leu Glu
                            680
                                               685
 Ser Leu Thr Arg Ser Thr Leu Leu Cys Leu Ser Ala Ile Gly Met Ile
                        695
 Ser Tyr Ala Thr Pro Val Phe Leu Val Ala Leu Leu Pro Leu Gly Val
                    710
                                        715
 Ala Phe Tyr Phe Ile Gln Lys Tyr Phe Arg Val Ala Ser Lys Asp Leu
                725
                                   730
 Gln Glu Leu Asp Asp Ser Thr Gln Leu Pro Leu Leu Cys His Phe Ser
                                745 ...
 Glu Thr Ala Glu Gly Leu Thr Thr Ile Arg Ala Phe Arg His Glu Thr
                            760
 Arg Phe Lys Gln Arg Met Leu Glu Leu Thr Asp Thr Asn Asn Ile Ala
                        775
 Tyr Leu Phe Leu Ser Ala Ala Asn Arg Trp Leu Glu Val Arg Thr Asp
                    790
                                        795
 Tyr Leu Gly Ala Cys Ile Val Leu Thr Ala Ser Ile Ala Ser Ile Ser
                                    810
Gly Ser Ser Asn Ser Gly Leu Val Gly Leu Gly Leu Leu Tyr Ala Leu
            820
                                825
                                                    830
 Thr Ile Thr Asn Tyr Leu Asn Trp Val Val Arg Asn Leu Ala Asp Leu
        835
                            840
                                                845
Glu Val Gln Met Gly Ala Val Lys Lys Val Asn Ser Phe Leu Thr Met
                        855
                                            860
Glu Ser Glu Asn Tyr Glu Gly Thr Met Asp Pro Ser Gln Val Pro Glu
                    870
                                        875
His Trp Pro Gln Glu Gly Glu Ile Lys Ile His Asp Leu Cys Val Arg
                885
                                    890
Tyr Glu Asn Asn Leu Lys Pro Val Leu Lys His Val Lys Ala Tyr Ile
           900
                                905
Lys Pro Gly Gln Lys Val Gly Ile Cys Gly Arg Thr Gly Ser Gly Lys
                            920
Ser Ser Leu Ser Leu Ala Phe Phe Arg Met Val Asp Ile Phe Asp Gly
                       935
                                           940
Lys Ile Val Ile Asp Gly Ile Asp Ile Ser Lys Leu Pro Leu His Thr
                   950
                                       955
Leu Arg Ser Arg Leu Ser Ile Ile Leu Gln Asp Pro Ile Leu Phe Ser
               965
                                   970
Gly Ser Ile Arg Phe Asn Leu Asp Pro Glu Cys Lys Cys Thr Asp Asp
                               985
Arg Leu Trp Glu Ala Leu Glu Ile Ala Gln Leu Lys Asn Met Val Lys
       995
                          1000
                                              1005
Ser Leu Pro Gly Gly Leu Asp Ala Val Val Thr Glu Gly Gly Glu Asn
                      1015
                                 .
                                         1020
Phe Ser Val Gly Gln Arg Gln Leu Phe Cys Leu Ala Arg Ala Phe Val
                  1030
                                      1035
Arg Lys Ser Ser Ile Leu Ile Met Asp Glu Ala Thr Ala Ser Ile Asp
              1045
                                  1050
Met Ala Thr Glu Asn Ile Leu Gln Lys Val Val Met Thr Ala Phe Ala
                              1065
                                                  1070
Asp Arg Thr Val Val Thr Met Ala His Arg Val Ser Ser Ile Met Asp
      1075
                         1080
Ala Gly Leu Val Leu Val Phe Ser Glu Gly Ile Leu Val Glu Cys Asp
                     1095
                                         1100
Thr Val Pro Asn Leu Phe Ala His Lys Asn Gly Pro Phe Ser Thr Leu
                 1110
                                      1115
Val Met Thr Asn Lys *
              1125
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<210> 1220 <211> 46 <212> PRT <213> Homo sapiens

<210> 1221 <211> 56 <212> PRT <213> Homo sapiens

<210> 1222 <211> 253 <212> PRT <213> Homo sapiens

<400> 1222

Met Gly Cys Ala Ile Ile Ala Gly Phe Leu His Tyr Leu Phe Leu Ala 10 Cys Phe Phe Trp Met Leu Val Glu Ala Val Ile Leu Phe Leu Met Val 20 Arg Asn Leu Lys Val Val Asn Tyr Phe Ser Ser Arg Asn Ile Lys Met 40 Leu His Ile Cys Ala Phe Gly Tyr Gly Leu Pro Met Leu Val Val 55 Ile Ser Ala Ser Val Gln Pro Gln Gly Tyr Gly Met His Asn Arg Cys 70 75 Trp Leu Asn Thr Glu Thr Gly Phe Ile Trp Ser Phe Leu Gly Pro Val 90 Cys Thr Val Ile Val Ile Asn Ser Leu Leu Leu Thr Trp Thr Leu Trp 105 Ile Leu Arg Gln Arg Leu Ser Ser Val Asn Ala Glu Val Ser Thr Leu

115 120 Lys Asp Thr Arg Leu Leu Thr Phe Lys Ala Phe Ala Gln Leu Phe Ile 135 140 Leu Gly Cys Ser Trp Val Leu Gly Ile Phe Gln Ile Gly Pro Val Ala 150 155 Gly Val Met Ala Tyr Leu Phe His His His Gln Gln Pro Ala Gly Gly 165 170 Leu His Leu Pro His Pro Leu Ser Ala Gln Arg Pro Gly Thr Arg Arg 180 185 Ile Gln Glu Val Asp His Trp Glu Asp Glu Ala Gln Leu Pro Val Pro 200 Asp Leu Lys Asp Leu Ala Val Leu His Ala Ile Arg Phe Gln Asp Gly 215 220 Leu Lys Ser Phe Leu Ala Phe Lys Tyr Ala Met Glu Pro Thr Val Gly 230 235 Gly Thr Ser Ser Phe Pro Cys Arg Glu Pro Tyr Pro 250

<210> 1223 <211> 858 <212> PRT <213> Homo sapiens

<400> 1223 Met Lys Met Leu Thr Arg Leu Gln Val Leu Thr Leu Ala Leu Phe Ser 10 Lys Gly Phe Leu Leu Ser Leu Gly Asp His Asn Phe Leu Arg Arg Glu 20 Ile Lys Ile Glu Gly Asp Leu Val Leu Gly Gly Leu Phe Pro Ile Asn Glu Lys Gly Thr Gly Thr Glu Glu Cys Gly Arg Ile Asn Glu Asp Arg 55 Gly Ile Gln Arg Leu Glu Ala Met Leu Phe Ala Ile Asp Glu Ile Asn 70 Lys Asp Asp Tyr Leu Leu Pro Gly Val Lys Leu Gly Val His Ile Leu 85 90 Asp Thr Cys Ser Arg Asp Thr Tyr Ala Leu Glu Gln Ser Leu Glu Phe 105 Val Arg Ala Ser Leu Thr Lys Val Asp Glu Ala Glu Tyr Met Cys Pro 120 125 Asp Gly Ser Tyr Ala Ile Gln Glu Asn Ile Pro Leu Leu Ile Ala Gly 140 Val Ile Gly Gly Ser Tyr Ser Arg Val Ser Ile Gln Gly Ala Asn Leu 150 Leu Arg Leu Phe Gln Ile Pro Gln Ile Arg Tyr Ala Ser Thr Ser Ala 165 170 Lys Leu Ser Asp Lys Ser Arg Tyr Asp Tyr Phe Ala Arg Thr Val Pro 185 Pro Asp Phe Tyr Gln Ala Lys Ala Met Ala Glu Ile Leu Arg Phe Phe 200 Asn Trp Thr Tyr Val Ser Thr Val Ala Ser Glu Gly Asp Tyr Gly Glu 215 220 Thr Gly Ile Glu Ala Phe Glu Glu Glu Ala Arg Leu Arg Asn Ile Cys 230 235 Ile Ala Thr Ala Glu Lys Val Gly Arg Ser Asn Ile Arg Lys Ser Tyr 245 250

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Asp Ser Val Ile Arg Glu Leu Leu Gln Lys Pro Asn Ala Arg Val Val
                              265
Val Leu Phe Met Arg Ser Asp Asp Ser Arg Glu Leu Ile Ala Ala Ala
                           280
Ser Arg Ala Asn Ala Ser Phe Thr Trp Val Ala Ser Asp Gly Trp Gly
                       295
Ala Gln Glu Ser Ile Ile Lys Gly Ser Glu His Val Ala Tyr Gly Ala
                   310
                                       315
Ile Thr Leu Glu Leu Ala Ser Gln Pro Val Arg Gln Phe Asp Arg Tyr
               325
                                  330
Phe Gln Ser Leu Asn Pro Tyr Asn Asn His Arg Asn Pro Trp Phe Arg
                               345
Asp Phe Trp Glu Gln Lys Phe Gln Cys Ser Leu Gln Asn Lys Arg Asn
                            360
His Arg Arg Val Cys Asp Lys His Leu Ala Ile Asp Ser Ser Asn Tyr
                        375
Glu Gln Glu Ser Lys Ile Met Phe Val Val Asn Ala Val Tyr Ala Met
                    390
                                       395
Ala His Ala Leu His Lys Met Gln Arg Thr Leu Cys Pro Asn Thr Thr
               405
                                    410
Lys Leu Cys Asp Ala Met Lys Ile Leu Asp Gly Lys Lys Leu Tyr Lys
                               425
Asp Tyr Leu Leu Lys Ile Asn Phe Thr Ala Pro Phe Asn Pro Asn Lys
                           440
Asp Ala Asp Ser Ile Val Lys Phe Asp Thr Phe Gly Asp Gly Met Gly
                       455
Arg Tyr Asn Val Phe Asn Phe Gln Asn Val Gly Gly Lys Tyr Ser Tyr
                   470
                                       475
Leu Lys Val Gly His Trp Ala Glu Thr Leu Ser Leu Asp Val Asn Ser
               485
                                   490
Ile His Trp Ser Arg Asn Ser Val Pro Thr Ser Gln Cys Ser Asp Pro
           500
                                505
Cys Ala Pro Asn Glu Met Lys Asn Met Gln Pro Gly Asp Val Cys Cys
                           520
Trp Ile Cys Ile Pro Cys Glu Pro Tyr Glu Tyr Leu Ala Asp Glu Phe
                       535
                                          540
Thr Cys Met Asp Cys Gly Ser Gly Gln Trp Pro Thr Ala Asp Leu Thr
                   550
                                      555
Gly Cys Tyr Asp Leu Pro Glu Asp Tyr Ile Arg Trp Glu Asp Ala Trp
               565
                                   570
Ala Ile Gly Pro Val Thr Ile Ala Cys Leu Gly Phe Met Cys Thr Cys
           580
                              585
Met Val Val Thr Val Phe Ile Lys His Asn Asn Thr Pro Leu Val Lys
                           600
Ala Ser Gly Arg Glu Leu Cys Tyr Ile Leu Leu Phe Gly Val Gly Leu
                       615
                                           620
Ser Tyr Cys Met Thr Phe Phe Phe Ile Ala Lys Pro Ser Pro Val Ile
                   630
                                       635
Cys Ala Leu Arg Arg Leu Gly Leu Gly Ser Ser Phe Ala Ile Cys Tyr
               645
                                   650
Ser Ala Leu Leu Thr Lys Thr Asn Cys Ile Ala Arg Ile Phe Asp Gly
                               665
Val Lys Asn Gly Ala Gln Arg Pro Lys Phe Ile Ser Pro Ser Ser Gln
                           680
Val Phe Ile Cys Leu Gly Leu Ile Leu Val Gln Ile Val Met Val Ser
                       695
                                           700
Val Trp Leu Ile Leu Glu Ala Pro Gly Thr Arg Arg Tyr Thr Leu Ala
                   710
                                       715
Glu Lys Arg Glu Thr Val Ile Leu Lys Cys Asn Val Lys Asp Ser Ser
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725 730 Met Leu Ile Ser Leu Thr Tyr Asp Val Ile Leu Val Ile Leu Cys Thr 740 745 Val Tyr Ala Phe Lys Thr Arg Lys Cys Pro Glu Asn Phe Asn Glu Ala 760 Lys Phe Ile Gly Phe Thr Met Tyr Thr Thr Cys Ile Ile Trp Leu Ala 775 780 Phe Leu Pro Ile Phe Tyr Val Thr Ser Ser Asp Tyr Arg Val Gln Thr 795 790 Thr Thr Met Cys Ile Ser Val Ser Leu Ser Gly Phe Val Val Leu Gly 810 Cys Leu Phe Ala Pro Lys Val His Ile Ile Leu Phe Gln Pro Gln Lys 825 Asn Val Val Thr His Arg Leu His Leu Asn Arg Phe Ser Val Ser Gly 840 Thr Gly Thr His Ile Leu Ser Val Leu * 855

<210> 1224 <211> 69 <212> PRT <213> Homo sapiens

<210> 1225 <211> 55 <212> PRT <213> Homo sapiens

<210> 1226

<211> 51 <212> PRT <213> Homo sapiens

<400> 1226

Met Ile Leu Ser Leu Leu Lys Phe Phe Pro Leu Leu Ser Ser Asp Thr 5 10 Pro Asn Ser Ser Val Pro Leu Leu Thr Thr Pro Arg Asp Pro Pro Tyr 20 25 His Leu Ser Pro Cys Ser Ser Ser Tyr Phe Val Lys Glu Gly Phe Ser Val Val * 50

<210> 1227 <211> 47 <212> PRT <213> Homo sapiens

<400> 1227 Met Ile Leu Phe Cys Val Met Val Phe Ile Leu Phe Ile Thr Phe His 10 Leu Gln Leu Pro Thr Val Gly Asp Val Thr Tyr Cys Phe Cys Ser Asn 25 30 Lys Leu Arg Lys Thr Arg Glu Leu Lys Lys Ile Ser Ser Asn 35

40

<210> 1228 <211> 60 <212> PRT <213> Homo sapiens

<400> 1228 Met Phe Ser Thr Ala Phe Trp Pro Pro Phe Leu Asn Pro Ser Leu Met 10 Phe Phe Thr Leu Leu Cys Ser Asp Phe Met Pro Cys Glu Ala Val Cys 20 25 Ser Ser Ile Ile Tyr Ser Phe Ile Pro Val Thr Lys Thr Gln Gly Ala 40 Ala Pro His Thr Arg Gly Pro Gln Pro His Thr 55

<210> 1229 <211> 52 <212> PRT <213> Homo sapiens

<400> 1229 Met Cys Glu Ser Thr Glu Leu Asn Met Thr Phe His Leu Phe Ile Val

1 5 15 16 17 Ala Leu Ala Gly Ala Gly Ala Ala Val Ile Ala Met Val His Tyr Leu 20 25 30

Met Val Leu Ser Ala Asn Trp Ala Tyr Val Lys Asp Ala Cys Arg Met 35 40 45

Ala Glu Val * 50 51

<210> 1230 <211> 362 <212> PRT <213> Homo sapiens

<400> 1230 Met Pro Val Ile Trp Ser Ala Leu Ser Ala Val Leu Leu Leu Ala Ser 10 Ser Tyr Phe Val Gly Ala Leu Ile Val His Ala Asp Cys Phe Leu Met 25 Arg Asn His Thr Ile Thr Glu Gln Pro Met Cys Phe Gln Arg Thr Thr 35 40 Pro Leu Ile Leu Gln Glu Val Ala Ser Phe Leu Lys Arg Asn Lys His 55 60 Gly Pro Phe Leu Leu Phe Val Ser Phe Leu His Val His Ile Pro Leu 75 Ile Thr Met Glu Asn Phe Leu Gly Lys Ser Leu His Gly Leu Tyr Gly Asp Asn Val Lys Glu Met Asp Trp Met Val Gly Arg Ile Leu Asp Thr 100 105 Leu Asp Val Glu Gly Leu Ser Asn Ser Thr Leu Ile Tyr Phe Thr Ser 120 Asp His Gly Gly Ser Leu Glu Asn Gln Leu Gly Asn Thr Gln Tyr Gly 135 140 Gly Trp Asn Gly Ile Tyr Lys Gly Gly Lys Gly Met Gly Gly Trp Glu 150 155 Gly Gly Ile Arg Val Pro Gly Ile Phe Arg Trp Pro Gly Val Leu Pro 165 170 Ala Gly Arg Val Ile Gly Glu Pro Thr Ser Leu Met Asp Val Phe Pro 185 Thr Val Val Arg Leu Ala Gly Ser Glu Val Pro Gln Asp Arg Val Ile 200 Asp Gly Gln Asp Leu Leu Pro Leu Leu Leu Gly Thr Ala Gln His Ser 215 Asp His Glu Phe Leu Met His Tyr Cys Glu Arg Phe Leu His Ala Ala 230 235 Arg Trp His Gln Arg Asp Arg Gly Thr Met Trp Lys Val His Phe Val 245 250 Thr Pro Val Phe Gln Pro Arg Gly Ser Arg Cys Leu Leu Trp Lys Glu 265 270 Lys Val Cys Pro Cys Phe Gly Glu Lys Ser Ser Pro Pro Arg Ser His 280 Pro Cys Phe Phe Asp Leu Ser Arg Ala Pro Ser Glu Thr His Ile Leu 295 Thr Pro Ala Ser Glu Pro Val Phe Tyr Gln Val Met Glu Arg Ser Pro 310 315 Ala Gly Gly Val Gly Thr Pro Ala Asp Thr Gln Pro Ser Ser Ala 330

Ala Gly Gln Ala Gly Gln Tyr Leu Glu Thr Gly Gly Ala Ala Leu Leu
340 345 350

Trp Ala Val Pro Pro Leu Val Gly Pro *
355 360 361

<210> 1231 <211> 53 <212> PRT <213> Homo sapiens

<400> 1231

<210> 1232 <211> 56 <212> PRT <213> Homo sapiens

<400> 1232

<210> 1233 <211> 56 <212> PRT <213> Homo sapiens

•

<210> 1234 <211> 125 <212> PRT <213> Homo sapiens

<400> 1234 Met Leu Ser Gln Leu Pro Arg Cys Gln Ser Ser Val Pro Ala Leu Ala **\10** His Pro Thr Arg Leu His Tyr Leu Leu Arg Leu Leu Thr Phe Leu Leu 20 Gly Pro Gly Ala Gly Gly Ala Glu Ala Gln Gly Met Leu Gly Arg Ala Leu Leu Ser Ser Leu Pro Asp Asn Cys Ser Phe Trp Asp Ala Phe 50 55 Arg Pro Glu Gly Arg Arg Ser Val Leu Arg Thr Ile Gly Glu Tyr Leu · · · 70 75 Glu Gln Asp Glu Glu Gln Pro Thr Pro Ser Gly Phe Glu Pro Thr Val 85 90 Asn Pro Ser Ser Gly Ile Ser Lys Met Glu Leu Leu Ala Cys Phe Ser 100 105 Val Ser Ala Leu Pro Glu Gly Lys Leu Leu Glu Gln * 120

<210> 1235 <211> 72 <212> PRT <213> Homo sapiens

<210> 1236 <211> 48 <212> PRT <213> Homo sapiens

Arg Ala Gly Gly Leu Gly Phe Thr His Cys Gln Ala Asn Ser Thr Thr 35 40 45 48

<210> 1237 <211> 208 <212> PRT <213> Homo sapiens

<400> 1237 Met Ala Phe Leu Arg Lys Val Tyr Ser Ile Leu Ser Leu Gln Val Leu 5 10 Leu Thr Thr Val Thr Ser Thr Val Phe Leu Tyr Phe Glu Ser Val Arg 20 25 Thr Phe Val His Glu Ser Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly 40 Ser Leu Gly Leu Ile Phe Ala Leu Ile Leu Asn Arg His Lys Tyr Pro 55 Leu Asn Leu Tyr Leu Leu Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr 70 75 Val Ala Val Val Thr Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala 85 90 Phe Ile Leu Thr Thr Thr Val Phe Phe Gly Leu Thr Val Tyr Thr Leu 105 Gln Ser Eys Lys Asp Phe Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu 120 125 Leu Trp Ile Leu Cys Leu Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser 135 Glu Ile Met Glu Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys 150 155 Gly Phe Ile Ile Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro 165 170 Glu Glu Tyr Val Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn 180 185 Leu Phe Leu His Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys 200

<210> 1238
<211> 173
<212> PRT
<213> Homo sapiens

70 75 Asn Phe Gly Phe Ser Leu Leu Arg Lys Ile Ser Met Arg His Asp Gly 85 90 Asn Met Val Phe Ser Pro Phe Gly Met Ser Leu Ala Met Thr Gly Leu 105 Met Leu Gly Ala Thr Gly Pro Thr Glu Thr Gln Ile Lys Arg Gly Leu 120 125 His Leu Gln Ala Leu Lys Pro Thr Lys Pro Gly Leu Leu Pro Ser Leu 135 140 Phe Lys Gly Leu Arg Glu Thr Leu Ser Arg Asn Leu Glu Leu Gly Leu 150 155 Thr Ala Gly Glu Phe Cys Leu His Pro Gln Gly Phe 170

<210> 1239 <211> 357 <212> PRT <213> Homo sapiens

<400> 1239 Met Ala Phe Leu Gly Leu Phe Ser Leu Leu Val Leu Gln Ser Met Ala 10 Thr Gly Ala Thr Phe Pro Glu Glu Ala Ile Ala Asp Leu Ser Val Asn 25 Met Tyr Asn Arg Leu Arg Ala Thr Gly Glu Asp Glu Asn Ile Leu Phe 40 Ser Pro Leu Ser Ile Ala Leu Ala Met Gly Met Met Glu Leu Gly Ala 55 Gln Gly Ser Thr Gln Lys Glu Ile Arg His Ser Met Gly Tyr Asp Ser 70 Leu Lys Asn Gly Glu Glu Phe Ser Phe Leu Lys Glu Phe Ser Asn Met 85 90 Val Thr Ala Lys Glu Ser Gln Tyr Val Met Lys Ile Ala Asn Ser Leu 105 Phe Val Gln Asn Gly Phe His Val Asn Glu Glu Phe Leu Gln Met Met 120 125 Lys Lys Tyr Phe Asn Ala Ala Val Asn His Val Asp Phe Ser Gln Asn 135 140 Val Ala Val Ala Asn Tyr Ile Asn Lys Trp Val Glu Asn Asn Thr Asn 150 155 Asn Leu Val Lys Asp Leu Val Ser Pro Arg Asp Phe Asp Ala Ala Thr 170 Tyr Leu Ala Leu Ile Asn Ala Val Tyr Phe Lys Gly Asn Trp Lys Ser 185 190 Gln Phe Arg Pro Glu Asn Thr Arg Thr Phe Ser Phe Thr Lys Asp Asp 200 205 Glu Ser Glu Val Gln Ile Pro Met Met Tyr Gln Gln Gly Glu Phe Tyr 215 Tyr Gly Glu Phe Ser Asp Gly Ser Asn Glu Ala Gly Gly Ile Tyr Gln 230 235 Val Leu Glu Ile Pro Tyr Glu Gly Asp Glu Ile Ser Met Met Leu Val 245 250 Leu Ser Arg Gln Glu Val Pro Leu Ala Thr Leu Glu Pro Leu Val Lys 265 270 Ala Gln Leu Val Glu Glu Trp Ala Asn Ser Val Lys Lys Gln Lys Val

<210> 1240 <211> 707 <212> PRT <213> Homo sapiens

<400> 1240 Met Leu Ser Leu Arg Arg Cys Thr Ser Met Arg Leu Cys Leu Ser Ser 10 Ser Leu Ala Ser Pro Cys Ser Thr Met Leu Ser Thr Val Val Leu Tyr 25 Lys Val Cys Asn Ser Phe Val Glu Met Gly Ser Ala Asn Val Gln Ala 40 Thr Asp Tyr Leu Lys Gly Val Ala Ser Leu Phe Val Val Ser Leu Gly 55 60 Gly Ala Ala Val Gly Leu Val Phe Ala Phe Leu Leu Ala Leu Thr Thr 70 75 Arg Phe Thr Lys Arg Val Arg Ile Ile Glu Pro Leu Leu Val Phe Leu 90 Leu Ala Tyr Ala Ala Tyr Leu Thr Ala Glu Met Ala Ser Leu Ser Ala 100 105 Ile Leu Ala Val Thr Met Cys Gly Leu Gly Cys Lys Lys Tyr Val Glu 120 Ala Asn Ile Ser His Lys Ser Arg Thr Thr Val Lys Tyr Thr Met Lys 135 140 Thr Leu Ala Ser Cys Ala Glu Thr Val Ile Phe Met Leu Leu Gly Ile 150 155 Ser Thr Val Asp Ser Ser Lys Trp Ala Trp Asp Ser Gly Leu Val Leu 165 170 Gly Thr Leu Ile Phe Ile Leu Phe Phe Arg Ala Leu Gly Val Val Leu 185 Gln Thr Trp Val Leu Asn Gln Phe Arg Leu Val Pro Leu Asp Lys Ile 200 Asp Gln Val Val Met Ser Tyr Gly Gly Leu Arg Gly Ala Val Ala Phe 215 220 Ala Leu Val Ile Leu Leu Asp Arg Thr Lys Val Pro Ala Lys Asp Tyr 230 235 Phe Val Ala Thr Thr Ile Val Val Val Phe Phe Thr Val Ile Val Gln 245 250 Gly Leu Thr Ile Lys Pro Leu Val Lys Trp Leu Lys Val Lys Arg Ser 265 Glu His His Lys Pro Thr Leu Asn Gln Glu Leu His Glu His Thr Phe 280 275 285 Asp His Ile Leu Ala Ala Val Glu Asp Val Val Gly His His Gly Tyr 295 300 His Tyr Trp Arg Asp Arg Trp Glu Gln Phe Asp Lys Lys Tyr Leu Ser

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315
305
                   310
Gln Leu Leu Met Arg Arg Ser Ala Tyr Arg Ile Arg Asp Gln Ile Trp
                       330
            325
Asp Val Tyr Tyr Arg Leu Asn Ile Arg Asp Ala Ile Ser Phe Val Asp
                    345
           340
Gln Gly Gly His Val Leu Ser Ser Thr Gly Leu Thr Leu Pro Ser Met
                          360
Pro Ser Arg Asn Ser Val Ala Glu Thr Ser Val Thr Asn Leu Leu Arg
                      375
                               380
Glu Ser Gly Ser Gly Ala Cys Leu Asp Leu Gln Val Ile Asp Thr Val
                   390
                                     395
Arg Ser Gly Arg Asp Arg Glu Asp Ala Val Met His His Leu Leu Cys
               405
                                 410
Gly Gly Leu Tyr Lys Pro Arg Arg Tyr Lys Ala Ser Cys Ser Arg
           420
                              425
His Phe Ile Ser Glu Asp Ala Gln Glu Arg Gln Asp Lys Glu Val Phe
                          440
Gln Gln Asn Met Lys Arg Arg Leu Glu Ser Phe Lys Ser Thr Lys His
                     455
                                        460
Asn Ile Cys Phe Thr Lys Ser Lys Pro Arg Pro Arg Lys Thr Gly Arg
                 470
                                    475
Arg Lys Lys Asp Gly Val Ala Asn Ala Glu Ala Thr Asn Gly Lys His
              485
                                490
Arg Gly Leu Gly Phe Gln Asp Thr Ala Ala Val Ile Leu Thr Val Glu
                            505
Ser Glu Glu Glu Glu Glu Ser Asp Ser Ser Glu Thr Glu Lys Glu
                         520
                                            525
Asp Asp Glu Gly Ile Ile Phe Val Ala Arg Ala Thr Ser Glu Val Leu
                     535
Gln Glu Gly Lys Val Ser Gly Ser Leu Glu Val Cys Pro Ser Pro Arg
                 550
                                     555
Ile Ile Pro Pro Ser Pro Thr Cys Ala Glu Lys Glu Leu Pro Trp Lys
                                570
Ser Gly Gln Gly Asp Leu Ala Val Tyr Val Ser Ser Glu Thr Thr Lys
                 585
Ile Val Pro Val Asp Met Gln Thr Gly Trp Asn Gln Ser Ile Ser Ser
               . 600
Leu Glu Ser Leu Ala Ser Pro Pro Cys Asn Gln Ala Pro Ile Leu Thr
                    615
                                       620
Cys Leu Pro Pro His Pro Arg Gly Thr Glu Glu Pro Gln Val Pro Leu
                  630
                                     635
His Leu Pro Ser Asp Pro Arg Ser Ser Phe Ala Phe Pro Pro Ser Leu
              645 .
                                 650
Ala Lys Ala Gly Arg Ser Arg Ser Glu Ser Ser Ala Asp Leu Pro Gln
                             665
Gln Gln Glu Leu Gln Pro Leu Met Gly His Lys Asp His Thr His Leu
                . 680
Ser Pro Gly Thr Ala Thr Ser His Trp Cys Ile Gln Phe Asn Arg Gly
Ser Arg Leu
705
     707
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<210> 1241

<211> 98

<212> PRT

<213> Homo sapiens

<210> 1242 <211> 422 <212> PRT <213> Homo sapiens

245

<400> 1242 Met Val Leu Trp Glu Ser Pro Arg Gln Cys Ser Ser Trp Thr Leu Cys 10 Glu Gly Phe Cys Trp Leu Leu Leu Pro Val Met Leu Leu Ile Val 25 Ala Arg Pro Val Lys Leu Ala Ala Phe Pro Thr Ser Leu Ser Asp Cys Gln Thr Pro Thr Gly Trp Asn Cys Ser Gly Tyr Asp Asp Arg Glu Asn 55 Asp Leu Phe Leu Cys Asp Thr Asn Thr Cys Lys Phe Asp Gly Glu Cys 70 75 Leu Arg Ile Gly Asp Thr Val Thr Cys Val Cys Gln Phe Lys Cys Asn 90 Asn Asp Tyr Val Pro Val Cys Gly Ser Asn Gly Glu Ser Tyr Gln Asn 100 105 Glu Cys Tyr Leu Arg Gln Ala Ala Cys Lys Gln Gln Ser Glu Ile Leu 115 120 Val Val Ser Glu Gly Ser Cys Ala Thr Asp Ala Gly Ser Gly Ser Gly 135 140 Asp Gly Val His Glu Gly Ser Gly Glu Thr Ser Gln Lys Glu Thr Ser 150 155 Thr Cys Asp Ile Cys Gln Phe Gly Ala Glu Cys Asp Glu Asn Ala Glu 165 170 Asp Val Trp Cys Val Cys Asn Ile Asp Cys Ser Gln Thr Asn Phe Asn 185 Pro Leu Cys Ala Ser Asp Gly Lys Ser Tyr Asp Asn Ala Cys Gln Ile 200 Lys Glu Ala Ser Cys Gln Lys Gln Glu Lys Ile Glu Val Leu Ser Leu 215 220 Gly Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly 235 His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala Asn Lys Leu Glu Glu

250

Ser Ala Arg Glu His His Ile Pro Cys Pro Glu His Tyr Asn Gly Phe

260 265 Cys Met His Gly Lys Cys Glu His Ser Ile Asn Met Gln Glu Pro Ser 280 Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His Cys Glu Lys Lys Asp 295 300 Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val Arg Phe Pro Val Cys 305 310 315 Leu Asn Arg Ser Cys Asp Trp Asn Asn Ser Asp Cys Cys His Leu Cys 325 330 335 Gly Gly Pro Leu His His Lys Glu Met Pro Pro Glu Ala Asn Arg Ile 340 345 Pro Pro Asp Arg Ser Lys Ile Pro Gly His Tyr Ser Ser Arg Gln Tyr 355 360 Asn Lys Ser Arg Pro Thr Arg Leu Ile Leu Lys Gly Ala Cys Phe His 370 375 380 Ser Gly Trp Thr Thr Glu Ser Leu Asp Tyr Thr Ile Gln Tyr Tyr Arg 385 390 395 400 Gln Lys Asn Lys Thr Arg Asp Leu Thr His Val Cys Leu Ala Phe Val 405 410 Gly Asn Leu His Gln * 420 421

<210> 1243 <211> 46 <212> PRT <213> Homo sapiens

<210> 1244 <211> 46 <212> PRT <213> Homo sapiens

<210> 1245 <211> 244 <212> PRT

<213> Homo sapiens

<400> 1245 Met Ala Gly Val Ile Ala Gly Leu Leu Met Phe Ile Ile Ile Leu Leu 10 Gly Val Met Leu Thr Ile Lys Arg Arg Arg Asn Ala Tyr Ser Tyr Ser Tyr Tyr Leu Lys Leu Ala Lys Lys Gln Lys Glu Thr Gln Ser Gly Ala Gln Arg Glu Met Gly Pro Val Ala Ser Ala Asp Lys Pro Thr Thr Lys 55 Leu Ser Ala Ser Arg Asn Asp Glu Gly Phe Ser Ser Ser Gln Asp 70 Val Asn Gly Phe Asn Gly Ser Arg Gly Glu Leu Ser Gln Pro Thr Leu 90 · Thr Ile Gln Thr His Pro Tyr Arg Thr Cys Asp Pro Val Glu Met Ser 105 Tyr Pro Arg Asp Gln Phe Gln Pro Ala Ile Arg Val Ala Asp Leu Leu 120 Gln His Ile Thr Gln Met Lys Arg Gly Gln Gly Tyr Gly Phe Lys Glu 135 Glu Tyr Glu Ala Leu Pro Glu Gly Gln Thr Ala Ser Trp Asp Thr Ala 150 155 Lys Glu Asp Glu Asn Arg Asn Lys Asn Arg Tyr Gly Asn Ile Ile Ser 165 170 Tyr Asp His Ser Arg Val Arg Leu Leu Val Leu Asp Gly Asp Pro His 185 Ser Asp Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr His Arg Pro Arg 195 200 205 His Tyr Ile Ala Thr Gln Gly Pro Met Gln Glu Thr Val Lys Asp Phe 215 220 Trp Arg Met Ile Trp Gln Glu Asn Ser Ala Ser Ile Val Met Val Thr . 225 230 235 Asn Pro Gly . 243

<210> 1246 <211> 565 <212> PRT <213> Homo sapiens

 Ala Val
 Phe
 Arg
 Ser
 Gly
 Leu
 Leu
 Val
 Leu
 Thr
 Thr
 Pro
 Leu
 Ala

 Ser
 Leu
 Ala
 Pro
 Arg
 Leu
 Ala
 Ser
 Ile
 Leu
 Thr
 Ser
 Ala
 Ala
 Arg
 Leu

 Ser
 Leu
 Ala
 Pro
 Ile
 Leu
 Thr
 Ser
 Ala
 Ala
 Arg
 Leu

 Val
 Asn
 His
 Thr
 Leu
 Tyr
 Val
 His
 Leu
 Gly
 Met
 Ser
 Leu
 Glu

 Gly
 Pro
 Ala
 Gln
 Pro
 Gln
 Tyr
 Ser
 Pro
 Val
 Gln
 Thr
 Phe
 Glu
 Val

 Gly
 Pro
 Ala
 Gln
 Pro
 Gln
 Tyr
 Ser
 Pro
 Val
 Gln
 Thr
 Phe
 Glu
 Val
 Ala
 Ala
 Thr
 Phe
 Glu
 Val
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 <

			100					105					110		
Val	Val	Leu 115	Thr	Asp	Phe	Gln	Thr 120		Asp	Gly	ser Ser	Glr 125		Ası	Pro
Val	Lys 130		Gln	Leu	Val	Arg		Ala	Thr	Ser	Cys		Ser	Cys	Cys
Pro 145		Leu	Ala	Ser	Val 150	Leu		Tyr	Ser	Asp	Туг		' Ile	Gly	Glu 160
		Val	Glu	Pro	Leu		Val	Pro	Leu 170	Pro		Thr	· Ile	_	Pro
Ala	Ser	Pro	Val 180	Ala		Ser	Pro		Gln		Val	Arg			
Arg	Gly	Ala	Val		Gly	Thr				Leu	His				Lys
Val	Leu 210	Leu	Ser	Val	Ala	Cys 215			Ala	Gln				Val	Val
Gly 225	Val		Asp	Lys		Leu		Lys	Ser	_			Pro	Glu	
		Pro	Tyr				Val	Glu				Glu	Phe		
Asp	Ile	Lys	Pro 260	245 Ser		Thr	Phe				Pro	Leu		_	
Tyr	Gly	Pro 275	Ala	Gly	Ser	Asp	Pro 280			Glu	Phe				Ser
Glu	Glu 290		Tyr	Arg	Gly	Gly 295			Ile	Asn	Arg			Leu	Glu
Asn 305		Leu	Glu	Glu	Leu 310	Ala	Leu	Tyr	Gln	Ile 315			Leu	Lys	_
	Arg	His	Thr	Glu 325			Glu	Asp	Lys 330	Val	Ser	Ser	Ser		320 Phe
Arg	Gln	Arg	Met 340		Gly	Asn	Leu	Leu 345			Pro	Tyr		335 Arg	Pro
Glu	Leu	Pro	Thr	Cys	Leu	Tyr	Val 360		Gly	Leu	Thr	Gly 365	350 Ile	Ser	Gly
Ser	Gly 370		Ser	Ser	Ile	Ala 375		Arg	Leu	Lys	Gly 380		Gly	Ala	Phe
Val 385		Asp	Ser	Asp	His 390		Gly	His	Arg	Ala 395		Ala	Pro	Gly	Gly 400
	Ala	Tyr	Gln	Pro		Val	Glu	Ala	Phe 410		Thr	Asp	Ile	Leu 415	
Lys	Asp	Gly	Ile 420	Ile	Asn	Arg	Lys	Val 425		Gly	Ser	Arg	Val 430		Gly
Asn	Lys	Lys 435	Gln	Leu	Lys	Ile	Leu 440	Thr	qeA	Ile	Met	Trp 445	Pro	Ile	Ile
Ala	Lys 450	Leu	Ala	Arg	Glu	Glu 455	Met	Asp	Arg	Ala	Val 460	Ala	Glu	Gly	Lys
Arg 465	Val	Cys	Val	Ile	Asp 470	Ala	Ala	Val	Leu	Leu 475	Glu	Ala	Gly	Trp	Gln 480
Asn	Leu	Val	His	Glu 485	Val	Trp	Thr	Ala	Val 490	Ile	Pro	Glu	Thr	Glu 495	Ala
			Ile 500					505					510		
Ser	Arg	Leu 515	Gln	Ser	Gln	Met	Ser 520	Gly	Gln.	Gln	Leu	Val 525	Glu	Gln	Ser
	530		Leu			535					540			-	
545			Ala	Trp	Ala 550	Leu	Leu	Gln	ГЛа	Arg 555	Ile	Pro	Lys	Thr	His 560
Gln	Ala	Leu	Asp 564	*											

<210> 1247 <211> 737 <212> PRT <213> Homo sapiens

<400> 1247 Met Phe Pro Ala Gly Pro Pro Trp Pro Arg Val Arg Val Val Gln Val Leu Trp Ala Leu Leu Ala Val Leu Leu Ala Ser Trp Arg Leu Trp Ala 25 Ile Lys Asp Phe Gln Glu Cys Thr Trp Gln Val Val Leu Asn Glu Phe . 40 Lys Arg Val Gly Glu Ser Gly Val Ser Asp Ser Phe Phe Glu Gln Glu 55 Pro Val Asp Thr Val Ser Ser Leu Phe His Met Leu Val Asp Ser Pro 70 Ile Asp Pro Ser Glu Lys Tyr Leu Gly Phe Pro Tyr Tyr Leu Lys Ile 85 90 Asn Tyr Ser Cys Glu Glu Lys Pro Ser Glu Asp Leu Val Arg Met Gly 105 His Leu Thr Gly Leu Lys Pro Leu Val Leu Val Thr Phe Gln Ser Pro 120 Val Asn Phe Tyr Arg Trp Lys Ile Glu Gln Leu Gln Ile Gln Met Glu 135 Ala Ala Pro Phe Arg Ser Lys Gly Gly Pro Gly Gly Gly Arg Asp 150 155 Arg Asn Leu Ala Gly Met Asn Ile Asn Gly Phe Leu Lys Arg Asp Arg 165 170 Asp Asn Asn Ile Gln Phe Thr Val Gly Glu Glu Leu Phe Asn Leu Met 185 Pro Gln Tyr Phe Val Gly Val Ser Ser Arg Pro Leu Trp His Thr Val 195 200 Asp Gln Ser Pro Val Leu Ile Leu Gly Gly Ile Pro Asn Glu Lys Tyr 215 220 Val Leu Met Thr Asp Thr Ser Phe Lys Asp Phe Ser Leu Val Glu Val 230 235 Asn Gly Val Gly Gln Met Leu Ser Ile Asp Ser Cys Trp Val Gly Ser 245 250 Phe Tyr Cys Pro His Ser Gly Phe Thr Ala Thr Ile Tyr Asp Thr Ile 260 265 Ala Thr Glu Ser Thr Leu Phe Ile Arg Gln Asn Gln Leu Val Tyr Tyr 280 285 Phe Thr Gly Thr Tyr Thr Leu Tyr Glu Arg Asn Arg Gly Ser Gly 295 300 Glu Cys Ala Val Ala Gly Pro Thr Pro Gly Glu Gly Thr Leu Val Asn 310 315 Pro Ser Thr Glu Gly Ser Trp Ile Arg Val Leu Ala Ser Glu Cys Ile 325 330 Lys Lys Leu Cys Pro Val Tyr Phe His Ser Asn Gly Ser Glu Tyr Ile 345 Met Ala Leu Thr Thr Gly Lys His Glu Gly Tyr Val His Phe Gly Thr 360 Ile Arg Val Thr Thr Cys Ser Ile Ile Trp Ser Glu Tyr Ile Ala Gly 375 380 Glu Tyr Thr Leu Leu Leu Val Glu Ser Gly Tyr Gly Asn Ala Ser

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385
                   390
                                     395
Lys Arg Phe Gln Val Val Ser Tyr Asn Thr Ala Ser Asp Asp Leu Glu
              405
                                410
Leu Leu Tyr His Ile Pro Glu Phe Ile Pro Glu Ala Arg Gly Leu Glu
          420
                            425
Phe Leu Met Ile Leu Gly Thr Glu Ser Tyr Thr Ser Thr Ala Met Ala
                       440
Pro Lys Gly Ile Phe Cys Asn Pro Tyr Asn Asn Leu Ile Phe Ile Trp
                     455
                               460
Gly Asn Phe Leu Leu Gln Ser Ser Asn Lys Glu Asn Phe Ile Tyr Leu
                           · 475
                 470
Ala Asp Phe Pro Lys Glu Leu Ser Ile Lys Tyr Met Ala Arg Ser Phe
                                 490
Arg Gly Ala Val Ala Ile Val Thr Glu Thr Glu Glu Ile Trp Tyr Leu
         500
                             505
Leu Glu Gly Ser Tyr Arg Val Tyr Gln Leu Phe Pro Ser Lys Gly Trp
                                 . 525
                        520
Gln Val His Ile Ser Leu Lys Leu Met Gln Gln Ser Ser Leu Tyr Ala
                     535
                                         540
Ser Asn Glu Thr Met Leu Thr Leu Phe Tyr Glu Asp Ser Lys Leu Tyr
                 550
                                     555
Gln Leu Val Tyr Leu Met Asn Asn Gln Lys Gly Gln Leu Val Lys Arg
              565
                                 570
Leu Val Pro Val Glu Gln Leu Leu Met Tyr Gln Gln His Thr Ser His
          580
                             585
Tyr Asp Leu Glu Arg Lys Gly Gly Tyr Leu Met Leu Ser Phe Ile Asp
                          600
                                           605
Phe Cys Pro Phe Ser Val Met Arg Leu Arg Ser Leu Pro Ser Pro Gln
                      615
                                        620
Arg Tyr Thr Arg Gln Glu Arg Tyr Arg Ala Arg Pro Pro Arg Val Leu
                 630
                                    635
Glu Arg Ser Gly Phe Pro Gln Gly Glu Leu Ala Arg His Leu Pro Gly
              645
                                650
Pro Gly Leu Leu Pro Ala Val Ala Ala Leu Arg Val Arg Gln Ala Val
                             665
                                               670
Arg Gly Pro Gly Ala Arg Pro His Leu Ala Leu Val Gly Glu Gln Gln
               680
Thr Arg Pro Gly Leu Leu Leu Leu Gly Glu Gln Leu Ala Lys Arg
                  695
                                       700
Gly Arg Arg Val His Arg Asn Gly Gln Leu Arg Lys Asp Leu Gln Pro
                 710
                                    715
Arg Val Arg Val Arg Ala Ala Gly Ala His Phe Pro Gly Gln Gly His
              725
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<210> 1248 <211> 175 <212> PRT <213> Homo sapiens

Pro Pro His Leu Ser His Trp Cys Leu Ser Pro Met Gln Met Asp Asp 40 Gly Cys Ala Arg Leu Cys Val Leu Trp Thr Ala Trp Met Arg Trp Arg Val Leu Met Cys Ser Cys Arg Val Trp Ala Thr Asp Leu Gly Ile Phe 70 Leu Gly Val Ala Leu Gly Asn Glu Pro Leu Glu Met Trp Pro Leu Thr 90 Gln Asn Glu Glu Cys Thr Val Thr Gly Phe Leu Arg Asp Lys Leu Gln 105 Tyr Arg Ser Arg Leu Gln Tyr Met Lys His Tyr Phe Pro Ile Asn Tyr 120 Lys Ile Arg Val Pro Tyr Glu Gly Val Phe Arg Ile Ala Asn Val Thr 135 Arg Leu Arg Ala Gln Gly Ser Glu Arg Glu Leu Arg Tyr Leu Gly Val 150 155 Leu Val Ser Leu Ser Ala Thr Glu Ser Val His Asp Glu Leu Leu

<210> 1249 <211> 68 <212> PRT <213> Homo sapiens

<210> 1250 <211> 209 <212> PRT <213> Homo sapiens

 Ala Leu Ser Phe Leu Leu Leu Leu Ser Har Ser Leu Leu Pro Ala Cys Ile Lys 1

 Leu Leu Leu Leu Ser Phe Leu Leu Leu Pro Ala Cys Ile Lys 15

 Leu Ile Leu Gln Pro Ser Ser Lys Gly Phe Lys Phe Thr Leu Val Ser 20

 Cys Ala Leu Ser Phe Phe Leu Phe Ser Phe Gln Val His Glu Lys Ser 35

 Ile Leu Leu Leu Val Ser Leu Pro Val Cys Leu Val Leu Ser Glu Ile Pro 50

 Phe Met Ser Thr Trp Phe Leu Leu Val Ser Thr Phe Ser Met Leu Pro 65

 Leu Leu Leu Lys Asp Glu Leu Leu Met Pro Ser Val Val Thr Thr Met

90 Ala Phe Phe Ile Ala Cys Val Thr Ser Phe Ser Ile Phe Glu Lys Thr 105 Ser Glu Glu Glu Leu Gln Leu Lys Ser Phe Ser Ile Ser Val Arg Lys 120 125 Tyr Leu Pro Cys Phe Thr Phe Leu Ser Arg Ile Ile Gln Tyr Leu Phe 135 Leu Ile Ser Val Ile Thr Met Val Leu Leu Thr Leu Met Thr Val Thr 150 155 Leu Asp Pro Pro Gln Lys Leu Pro Asp Leu Phe Ser Val Leu Val Cys 165 170 175 Phe Val Ser Cys Leu Asn Phe Leu Phe Phe Leu Val Tyr Phe Asn Ile 180 185 190 Ile Ile Met Trp Asp Ser Lys Ser Gly Arg Asn Gln Lys Lys Ile Ser 200 205

<210> 1251 <211> 58 <212> PRT <213> Homo sapiens

<210> 1252 <211> 84 <212> PRT <213> Homo sapiens

 400> 1252

 Met Tyr Lys Asn Phe Cys Leu Phe Phe Ile Phe Ala Leu Tyr Gln Gly 1

 Leu Ala Asn Tyr Gly Leu Trp Ala Asn Ser Asn Pro Leu His Val Ser 20

 Val Tyr Lys Ile Leu Leu Gly Cys Val Pro Trp Leu Leu Ser Val Val 35

 Ser Ala Ser Arg Val Ala Gly Thr Thr Gly Thr His His Tyr Ala Trp 50

 Ile Ile Phe Cys Ile Phe Ser Thr Asp Gly Val Ser Pro Arg Trp Pro 65

 Arg Trp Ser *

<210> 1253 <211> 73 <212> PRT <213> Homo sapiens

<400> 1253

> <210> 1254 <211> 209 <212> PRT <213> Homo sapiens

<400> 1254 Met Ser Phe Cys Phe Thr Phe Leu Ser Leu Leu Pro Ala Cys Ile Lys 5 10 Leu Ile Leu Gln Pro Ser Ser Lys Gly Phe Lys Phe Thr Leu Val Ser 20 25 Cys Ala Leu Ser Phe Phe Leu Phe Ser Phe Gln Val His Glu Lys Ser 40 Ile Leu Leu Val Ser Leu Pro Val Cys Leu Val Leu Ser Glu Ile Pro 55 Phe Met Ser Thr Trp Phe Leu Leu Val Ser Thr Phe Ser Met Leu Pro 70 75 Leu Leu Lys Asp Glu Leu Leu Met Pro Ser Val Val Thr Thr Met 85 90 Ala Phe Phe Ile Ala Cys Val Thr Ser Phe Ser Ile Phe Glu Lys Thr 1.05 110 Ser Glu Glu Glu Leu Gln Leu Lys Ser Phe Ser Ile Ser Val Arg Lys 120 125 Tyr Leu Pro Cys Phe Thr Phe Leu Ser Arg Ile Ile Gln Tyr Leu Phe 135 140 Leu Ile Ser Val Ile Thr Met Val Leu Leu Thr Leu Met Thr Val Thr 150 155 Leu Asp Pro Pro Gln Lys Leu Pro Asp Leu Phe Ser Val Leu Val Cys 165 170 Phe Val Ser Cys Leu Asn Phe Leu Phe Phe Leu Val Tyr Phe Asn Ile 185 190 Ile Ile Met Trp Asp Ser Lys Ser Gly Arg Asn Gln Lys Lys Ile Ser 200

<210> 1255 <211> 730 <212> PRT <213> Homo sapiens

<400> 1255 Met Gly Pro Trp Gly Trp Lys Leu Arg Trp Thr Val Ala Leu Leu Leu Ala Ala Ala Gly Thr Ala Val Gly Asp Arg Cys Glu Arg Asn Glu Phe 25 Gln Cys Gln Asp Gly Lys Cys Ile Ser Tyr Lys Trp Val Cys Asp Gly 40 Ser Ala Glu Cys Gln Asp Gly Ser Asp Glu Ser Gln Glu Thr Cys Leu 55 60 Ser Val Thr Cys Lys Ser Gly Asp Phe Ser Cys Gly Gly Arg Val Asn 70 Arg Cys Ile Pro Gln Phe Trp Arg Cys Asp Gly Gln Val Asp Cys Asp 90 Asn Gly Ser Asp Glu Gln Gly Cys Pro Pro Lys Thr Cys Ser Gln Asp 105 Glu Phe Arg Cys His Asp Gly Lys Cys Ile Ser Arg Gln Phe Val Cys 120 Asp Ser Asp Arg Asp Cys Leu Asp Gly Ser Asp Glu Ala Ser Cys Pro 135 140 Val Leu Thr Cys Gly Pro Ala Ser Phe Gln Cys Asn Ser Ser Thr Cys 150 155 Ile Pro Gln Leu Trp Ala Cys Asp Asn Asp Pro Asp Cys Glu Asp Gly 165 170 Ser Asp Glu Trp Pro Gln Arg Cys Arg Gly Leu Tyr Val Phe Gln Gly 180 . 185 Asp Ser Ser Pro Cys Ser Ala Phe Glu Phe His Cys Leu Ser Gly Glu 195 200 Cys Ile His Ser Ser Trp Arg Cys Asp Gly Gly Pro Asp Cys Lys Asp 215 220 Lys Ser Asp Glu Glu Asn Cys Ala Val Ala Thr Cys Arg Pro Asp Glu 230 235 Phe Gln Cys Ser Asp Gly Asn Cys Ile His Gly Ser Arg Gln Cys Asp 250 Arg Glu Tyr Asp Cys Lys Asp Met Ser Asp Glu Val Gly Cys Val Asn 260 265 Val Thr Leu Cys Glu Gly Pro Asn Lys Phe Lys Cys His Ser Gly Glu 280 Cys Ile Thr Leu Asp Lys Val Cys Asn Met Ala Arg Asp Cys Arg Asp 295 300 Trp Ser Asp Glu Pro Ile Lys Glu Cys Gly Thr Asn Glu Cys Leu Asp 315 Asn Asn Gly Gly Cys Ser His Val Cys Asn Asp Leu Lys Ile Gly Tyr 325 Glu Cys Leu Cys Pro Asp Gly Phe Gln Leu Val Ala Gln Arg Arg Cys 345 Glu Asp Ile Asp Glu Cys Gln Asp Pro Asp Thr Cys Ser Gln Leu Cys 360 Val Asn Leu Glu Gly Gly Tyr Lys Cys Gln Cys Glu Glu Gly Phe Gln 375 380 Leu Asp Pro His Thr Lys Ala Cys Lys Ala Val Gly Ser Ile Ala Tyr 390 395 Leu Phe Phe Thr Asn Arg His Glu Val Arg Lys Met Thr Leu Asp Arg

Ser Glu Tyr Thr Ser Leu Ile Pro Asn Leu Arg Asn Val Val Ala Leu 425 430 420 Asp Thr Glu Val Ala Ser Asn Arg Ile Tyr Trp Ser Asp Leu Ser Gln 440 Arg Met Ile Cys Ser Thr Gln Leu Asp Arg Ala His Gly Val Ser Ser 455 Tyr Asp Thr Val Ile Ser Arg Asp Ile Gln Ala Pro Asp Gly Leu Ala 470 475 Val Asp Trp Ile His Ser Asn Ile Tyr Trp Thr Asp Ser Val Leu Gly 485 490 Thr Val Ser Val Ala Asp Thr Lys Gly Val Lys Arg Lys Thr Leu Phe 500 505 Arg Glu Asn Gly Ser Lys Pro Arg Ala Ile Val Val Asp Pro Val His 520 525 Gly Phe Met Tyr Trp Thr Asp Trp Gly Thr Pro Ala Lys Ile Lys Lys 535 Gly Gly Leu Asn Gly Val Asp Ile Tyr Ser Leu Val Thr Glu Asn Ile 550 555 Gln Trp Pro Asn Gly Ile Thr Leu Asp Leu Leu Ser Gly Arg Leu Tyr 565 570 Trp Val Asp Ser Lys Leu His Ser Ile Ser Ser Ile Asp Val Asn Gly 585 Gly Asn Arg Lys Thr Ile Leu Glu Asp Glu Lys Arg Leu Ala His Pro 600 Phe Ser Leu Ala Val Phe Glu Asp Lys Val Phe Trp Thr Asp Ile Ile 615 620 Asn Glu Ala Ile Phe Ser Ala Asn Arg Leu Thr Gly Ser Asp Val Asn 635 630 Leu Leu Ala Glu Asn Leu Leu Ser Pro Glu Asp Met Val Leu Phe His 650 645 Asn Leu Thr Gln Pro Arg Gly Val Asn Trp Cys Glu Arg Thr Thr Leu 665 Ser Asn Gly Gly Cys Gln Tyr Leu Cys Leu Pro Ala Pro Gln Ile Asn 675 680 Pro His Ser Pro Lys Phe Thr Cys Ala Cys Pro Asp Gly Met Leu Leu 700 695 Ala Arg Gly His Glu Glu Leu Pro His Arg Gly Leu Arg Leu Gln Trp 710 715 Pro Pro Arg Arg His Pro Pro Ser Gly 725

<210> 1256 <211> 264 <212> PRT <213> Homo sapiens

<400> 1256

Met Arg Gly Asn Leu Ala Leu Val Gly Val Leu Ile Ser Leu Ala Phe 10 Leu Ser Leu Leu Pro Ser Gly His Pro Gln Pro Ala Gly Asp Asp Ala 20 25 Cys Ser Val Gln Ile Leu Val Pro Gly Leu Lys Gly Asp Ala Gly Glu 40 Lys Gly Asp Lys Gly Ala Pro Gly Arg Pro Gly Arg Val Gly Pro Thr Gly Glu Lys Gly Asp Met Gly Asp Lys Gly Gln Lys Gly Ser Val Gly

```
70
Arg His Gly Lys Ile Gly Pro Ile Gly Ser Lys Gly Glu Lys Gly Asp
               85
                                   90
Ser Gly Asp Ile Gly Pro Pro Gly Pro Asn Gly Glu Pro Gly Leu Pro
                             105
Cys Glu Cys Ser Gln Leu Arg Lys Ala Ile Gly Glu Met Asp Asn Gln
      115
                         120
Val Ser Gln Leu Thr Ser Glu Leu Lys Phe Ile Lys Asn Ala Val Ala
                    135
                                         140
Gly Val Arg Glu Thr Glu Ser Lys Ile Tyr Leu Leu Val Lys Glu Glu
                 150
                             155
Lys Arg Tyr Ala Asp Ala Gln Leu Ser Cys Gln Gly Arg Gly Gly Thr
               165
                                 170
Leu Ser Met Pro Lys Asp Glu Ala Ala Asn Gly Leu Met Ala Ala Tyr
                              185
                                        190
Leu Ala Gln Ala Gly Leu Ala Arg Val Phe Ile Gly Ile Asn Asp Leu
                          200
Glu Lys Glu Gly Ala Phe Val Tyr Ser Asp His Ser Pro Met Arg Thr
                      215
                                         220
Phe Asn Lys Trp Arg Ser Gly Glu Pro Asn Asn Ala Tyr Asp Glu Glu
                  230
                                     235
Asp Cys Val Glu Met Val Ala Ser Gly Gly Trp Asn Asp Val Ala Cys
               245
                                  250
His Thr Thr Met Tyr Phe Met *
           260
                      263
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<210> 1257 <211> 407 <212> PRT <213> Homo sapiens

<400> 1257 Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu Cys Ala Ala 10 Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala His Gly Leu 40 Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg Thr Arg Ser 55 Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly Ser Ala Cys 75 Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro Glu Ser Arg 85 90 Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu Lys Ala Gln 100 105 Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln Gln Gln Arg 115 120 His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln Ser Gln Phe 135 140 Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala Lys Pro Ala 150 155 Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp Pro Ala His 165 170 Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln Glu Leu Phe 185

Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln Pro Gln Gly 195 200 205 Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp Gly Gly Trp 215 Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe Asn Arg Pro 230 235 Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly Glu Phe Trp 250 245 Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg Asn Ser Arg 260 265 270 Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu Leu Leu Gln 285 275 280 Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser Leu Gln Leu 300 295 Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val Pro Pro Ser 310 315 Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His Asp Leu Arg 325 330 Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly Gly Trp Trp Phe Gly 340 345 350 Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg Ser Ile Pro 360 365 Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys Thr Trp Arg 370 375 380 Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile Gln Pro Met 390 395 Ala Ala Glu Ala Ala Ser * 405 406

<210> 1258 <211> 120 <212> PRT

<213> Homo sapiens

<400> 1258 Met Met Thr Pro Lys Leu Met Ile Trp Leu Leu Gln Ala Lys Ser Ser Ile Ser Met Leu Glu Lys Ser Ser Lys Cys Leu Gly Arg Cys Phe 20 25 Ser Ser Phe Ala Lys Asn Leu Val Met Ile Gln Ser Cys Val Ser Trp 35 40 45 Ala Leu Met Ser Glu Asn Phe Tyr Arg Thr Leu Met Leu Cys Thr Thr 55 60 Thr Leu Leu Pro Ser Thr Gln Glu Cys Val His Leu Pro Leu Gly Ala 70 75 Leu Met Gln Lys Arg Ala Lys Asp Ser Phe Cys Thr Thr Thr Gln Arg 85 90 Glu Lys Asp Phe Arg Ile Leu Ser Leu Glu Ser Ser Lys Gln Trp His 100 105 Asn Lys Ser Met Ala Leu Lys * 115 119

<210> 1259 <211> 160

<212> PRT <213> Homo sapiens

<400> 1259 Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr 20 25 Arg Pro Arg Phe Leu Glu Tyr Ser Thr Gly Glu Cys Tyr Phe Phe Asn 40 Gly Thr Glu Arg Val Arg Phe Leu Asp Arg Tyr Phe Tyr Asn Gln Glu 55 Glu Tyr Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr 75 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Leu Glu Gln Pro Glu Gly Arg 85 90 Pro Trp Asn Ser Gln Lys Asp Ile Leu Glu Asp Glu Arg Ala Ala Val 105 Asp Thr Tyr Cys Arg His Asn Tyr Gly Val Val Glu Ser Phe Thr Val 120 125 Gln Arg Arg Val His Pro Lys Val Thr Val Tyr Pro Ser Lys Thr Gln 135 Pro Leu Gln Ala Pro Gln Pro Ala Val Leu Phe Cys Glu Trp Phe * 150

<210> 1260 <211> 111 <212> PRT <213> Homo sapiens

<210> 1261 <211> 123 <212> PRT <213> Homo sapiens

<400> 1261

 Met
 Ile
 Pro
 Ala
 Arg
 Phe
 Ala
 Gly
 Val
 Leu
 Leu
 Ala
 Leu
 Ile
 Ile
 Ala
 Leu
 Ile
 Ile
 Ala
 Leu
 Ile
 Ile</th

<210> 1262 <211> 737 <212> PRT <213> Homo sapiens

<400> 1262 Met Phe Pro Ala Gly Pro Pro Trp Pro Arg Val Arg Val Val Gln Val 10 Leu Trp Ala Leu Leu Ala Val Leu Leu Ala Ser Trp Arg Leu Trp Ala 20 Ile Lys Asp Phe Gln Glu Cys Thr Trp Gln Val Val Leu Asn Glu Phe 40 Lys Arg Val Gly Glu Ser Gly Val Ser Asp Ser Phe Phe Glu Gln Glu 55 60 Pro Val Asp Thr Val Ser Ser Leu Phe His Met Leu Val Asp Ser Pro 70 75 Ile Asp Pro Ser Glu Lys Tyr Leu Gly Phe Pro Tyr Tyr Leu Lys Ile 85 . 90 Asn Tyr Ser Cys Glu Glu Lys Pro Ser Glu Asp Leu Val Arg Met Gly 105 His Leu Thr Gly Leu Lys Pro Leu Val Leu Val Thr Phe Gln Ser Pro 120 Val Asn Phe Tyr Arg Trp Lys Ile Glu Gln Leu Gln Ile Gln Met Glu 135 140 Ala Ala Pro Phe Arg Ser Lys Gly Gly Pro Gly Gly Gly Arg Asp 150 155 Arg Asn Leu Ala Gly Met Asn Ile Asn Gly Phe Leu Lys Arg Asp Arg 165 170 Asp Asn Asn Ile Gln Phe Thr Val Gly Glu Glu Leu Phe Asn Leu Met 185 Pro Gln Tyr Phe Val Gly Val Ser Ser Arg Pro Leu Trp His Thr Val 200 Asp Gln Ser Pro Val Leu Ile Leu Gly Gly Ile Pro Asn Glu Lys Tyr 215 220 Val Leu Met Thr Asp Thr Ser Phe Lys Asp Phe Ser Leu Val Glu Val 230 235 Asn Gly Val Gly Gln Met Leu Ser Ile Asp Ser Cys Trp Val Gly Ser 245 250 Phe Tyr Cys Pro His Ser Gly Phe Thr Ala Thr Ile Tyr Asp Thr Ile

			260					265	i				270		
Ala	Thr	Glu 275	Ser	Thr	Leu	Phe	1le 280		Gln	Asn	Gln	Leu 285		Тут	Tyr
Phe	Thr 290	Gly	Thr	Tyr	Thr	Thr 295		Tyr	Glu	Arg	Asn 300		Gly	Ser	Gly
Glu 305	Сув	Ala	Val	Ala	Gly 310	Pro	Thr	Pro	Gly	Glu 315		Thr	Leu	Val	Asn 320
			Glu	325					330					335	
			Cys 340					345					350		
		355	Thr				360					365		_	
	370		Thr			375					380				
385			Leu		390					395					400
		•	Gln	405					410				_	415	
			His 420 Ile					425		-			430		
		435	Ile				440					445			
	450		Leu			455					460				_
465					470					475				=	480
			Pro	485					490					495	
			Val 500					505					510		
		515	Ser				520					525			
	530		Ile			535					540			_	
545			Thr Tyr		550					555					560
			Val	565					570					575	_
			580 Glu					585					590		
		595	Phe				600					605			-
	610		Arg			615					620				
625					630					635					640
			Gly	645					650					655	-
			Leu 660					665					670		
		675	Gly				680					685			
	690		Gly			695					700				-
705			Val		710					715					720
Arg	Val	Arg	Val	Arg 725	Ala	Ala	Gly	Ala	His 730	Phe	Pro	Gly	Gln	Gly 735	

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<210> 1263 <211> 48 <212> PRT <213> Homo sapiens

<400> 1263 Met Gly Ala Gly Cys Thr Pro Val Val Leu Gly Ala Ala Leu Trp Leu 5 10

Trp Arg Trp Phe Ser Arg Trp Gly Leu Gly Gly Leu Cys Trp Arg Pro 20 25 Cys Thr Cys Thr Pro Cys His Ser Ala Ser Pro Gly Ala Gly Arg

15

35 47

<210> 1264 <211> 61 <212> PRT

<213> Homo sapiens

<400> 1264 Met Met Tyr Ile Leu Phe Leu Gln Ala Phe Ile Leu Asp Tyr Tyr Gln

. 5 Tyr Phe Leu Gly Leu Asn Cys Val Tyr Ser Tyr Gln Ser Lys Lys Asp 20 25 Phe Ser Gln Ile Trp Ser Gln Gly Trp Phe Ala Leu Leu Trp Ile Leu 40 45

Cys Leu Ser Arg Ile Leu Glu Ser Phe Phe Leu

<210> 1265 <211> 58 <212> PRT

<213> Homo sapiens

<400> 1265 Met Val Gly Phe Leu Cys Cys Phe Tyr Leu Phe Gln Leu Leu Gly Pro 5 10 Gly Leu Leu Cys Leu Pro Lys Ala Val Leu Ser Phe Leu Gly Leu Leu 20 25 30 Glu Ala Ala His His Leu Leu Val Lys Gly Phe Leu Leu Pro Val Leu

40

Asp Leu Pro Gln Val Ile Val His Gln * 50

> <210> 1266 <211> 148

<212> PRT <213> Homo sapiens

<400> 1266 Met Ala Leu Gln Leu Trp Ala Leu Thr Leu Leu Gly Leu Leu Gly Ala 10 Gly Ala Ser Leu Arg Pro Arg Lys Leu Asp Phe Phe Arg Ser Glu Lys 25 Glu Leu Asn His Leu Ala Val Asp Glu Ala Ser Gly Val Val Tyr Leu 40 Gly Ala Val Asn Ala Leu Tyr Gln Leu Asp Ala Lys Leu Gln Leu Glu 55 60 Gln Gln Val Ala Thr Gly Pro Val Leu Asp Asn Lys Lys Cys Thr Pro 70 75 Pro Ile Glu Ala Ser Gln Cys His Glu Ala Glu Met Thr Asp Asn Val 85 90 Asn Gln Leu Leu Val Asp Pro Pro Arg Lys Arg Leu Val Glu Cys 105 Gly Gln Leu Leu Lys Gly Ile Leu Arg Ser Ala Arg Pro Glu Gln His 115 120 125 Leu Pro Pro Pro Val Leu Arg Gly Arg Gln Arg Gly Glu Val Phe Arg 130 135 Gly Gln Gln *

<210> 1267 <211> 227 <212> PRT <213> Homo sapiens

<400> 1267 arg Trp Leu

Met Arg Trp Leu Trp Pro Leu Ala Val Ser Leu Ala Val Ile Leu Ala 10 Val Gly Leu Ser Arg Val Ser Gly Gly Ala Pro Leu His Leu Gly Arg 25 His Arg Ala Glu Thr Gln Glu Gln Gln Ser Arg Ser Lys Arg Gly Thr Glu Asp Glu Glu Ala Lys Gly Val Gln Gln Tyr Val Pro Glu Glu Trp . 55 Ala Glu Tyr Pro Arg Pro Ile His Pro Ala Gly Leu Gln Pro Thr Lys 70 75 Pro Leu Val Ala Thr Ser Pro Asn Pro Asp Lys Asp Gly Gly Thr Pro 85 90 Asp Ser Gly Gln Glu Leu Arg Gly Asn Leu Thr Gly Ala Pro Gly Gln 105 Arg Leu Gln Ile Gln Asn Pro Leu Tyr Pro Val Thr Glu Ser Ser Tyr 120 Ser Ala Tyr Ala Ile Met Leu Leu Ala Leu Val Glu Phe Ala Ala Gly 135 Ile Val Gly Asn Leu Ser Val Met Cys Ile Ala Trp His Ser Tyr Tyr 155 150 Leu Lys Ser Ala Trp Asn Ser Ile Leu Ala Ser Leu Ala Leu Trp Asp 170 Phe Leu Val Leu Phe Phe Cys Leu Pro Ile Val Ile Leu Asn Glu Ile 185

Thr Lys Gln Arg Leu Leu Gly Asp Ala Pro Cys Pro Cys Arg Ala Leu 195 200 205

His Gly Gly Leu Leu Ser Gly Ser His Asp Phe Gln Pro Leu Cys Pro 210 220

Gly His *

225 226

<210> 1268 <211> 983 <212> PRT

<213> Homo sapiens

<400> 1268 . Met Leu Gly Asn Val Leu Leu Leu Cys Phe Phe Val Phe Phe Ile Phe 1 . 5 10 Gly Ile Val Gly Val Gln Leu Trp Ala Gly Leu Leu Arg Asn Arg Cys 20 25 Phe Leu Pro Glu Asn Phe Ser Leu Pro Leu Ser Val Asp Leu Glu Arg Tyr Tyr Gln Thr Glu Asn Glu Asp Glu Ser Pro Phe Ile Cys Ser Gln . 60 55 Pro Arg Glu Asn Gly Met Arg Ser Cys Arg Ser Val Pro Thr Leu Arg 70 75 Gly Asp Gly Gly Gly Pro Pro Cys Gly Leu Asp Tyr Glu Ala Tyr 90 Asn Ser Ser Ser Asn Thr Thr Cys Val Asn Trp Asn Gln Tyr Tyr Thr 105 Asn Cys Ser Ala Gly Glu His Asn Pro Phe Lys Gly Ala Ile Asn Phe 120 125 Asp Asn Ile Gly Tyr Ala Trp Ile Ala Ile Phe Gln Val Ile Thr Leu 135 140 Glu Gly Trp Val Asp Ile Met Tyr Phe Val Met Asp Ala His Ser Phe 150 155 Tyr Asn Phe Ile Tyr Phe Ile Leu Leu Ile Ile Val Gly Ser Phe Phe 165 170 Met Ile Asn Leu Cys Leu Val Val Ile Ala Thr Gln Phe Ser Glu Thr 180 185 190 Lys Gln Arg Glu Ser Gln Leu Met Arg Glu Gln Arg Val Arg Phe Leu 200 Ser Asn Ala Ser Thr Leu Ala Ser Phe Ser Glu Pro Gly Ser Cys Tyr 210 215 Glu Glu Leu Leu Lys Tyr Leu Val Tyr Ile Leu Arg Lys Ala Ala Arg 230 235 Arg Leu Ala Gln Val Ser Arg Ala Ala Gly Val Arg Val Gly Leu Leu 250 245 Ser Ser Pro Ala Pro Leu Gly Gly Gln Glu Thr Gln Pro Ser Ser Ser 265 270 Cys Ser Arg Ser His Arg Arg Leu Ser Val His His Leu Val His His 280 His His His His His His Tyr His Leu Gly Asn Gly Thr Leu Arg 295 300 Ala Pro Arg Ala Ser Pro Glu Ile Gln Asp Arg Asp Ala Asn Gly Ser 310 315 · Arg Arg Leu Met Leu Pro Pro Pro Ser Thr Pro Ala Leu Ser Gly Ala 325 . 330 Pro Pro Gly Gly Ala Glu Ser Val His Ser Phe Tyr His Ala Asp Cys

			340					345					350		
His	Leu	Glu 355	Pro	Val	Arg	Сув	Gln 360		Pro	Pro	Pro	Arg 365		Pro	Ser
	370		_			375					380	_			Val
His 385	Thr	Ser	Pro	Pro	Pro 390	Glu	Thr	Leu	Lys	Glu 395	_	Ala	Leu	Val	Glu 400
Val	Ala	Ala	Ser	Ser 405	Gly	Pro	Pro	Thr	Leu 410		Ser	Leu	Asn	Ile 415	Pro
Pro	Gly	Pro	Tyr 420	Ser	Ser	Met	His	Lys 425		Leu	Glu	Thr	Gln 430	Ser	Thr
Gly	Ala	Cys 435	Gln	Ser	Ser	Суз	Lys 440		Ser	Ser	Pro	Сув 445		Lys	Ala
Asp	Ser 450	Gly	Ala	Cys	Gly	Pro 455	qaA	Ser	Сув	Pro	Tyr 460	Сув	Ala	Arg	Ala
465					470					475					Asp 480
Ser	Glu	Ala	Val	Tyr 485	Glu	Phe	Thr	Gln	Asp 490	Ala	Gln	His	Ser	Asp 495	Leu
Arg	Asp	Pro	His 500	Ser	Arg	Arg	Gln	Arg 505		Leu	Gly	Pro	Asp 510	Ala	Glu
		515	Val				520	_			_	525			_
	530		Asp			535					540				
545					550		_			555					Glu 560
			Asn	565					570					575	
			Glu 580					585			_	_	590		_
		595	Asn				600					605			
	610	-	Glu			615					620				
625			Arg		630				_	635		_			640
			Arg	645					650					655	
			Cys 660					665					670		
	_	675	His			_	680	-				685	_	_	•
	690		Pro			695					700				
705			Phe		710					715	_		-		720
			Met	725			•		730				-	735	
			Thr 740					745					750		
		755	Glu				760					765			
	770		Asp -			775				-	780	_	-	_	_
785			Leu -		790				_	795					800
гув	ser	ьeu	Leu	Pro 805	Pro	Leu	Ile	ITE	His 810	Thr	Ala	Ala	Thr	Pro 815	Met

Ser Leu Pro Lys Ser Thr Ser Thr Gly Leu Gly Glu Ala Leu Gly Pro 820 825 830 Ala Ser Arg Arg Thr Ser Ser Ser Gly Ser Ala Glu Pro Gly Ala Ala 840 His Glu Met Lys Ser Pro Pro Ser Ala Arg Ser Ser Pro His Ser Pro 855 Trp Ser Ala Ala Ser Ser Trp Thr Ser Arg Arg Ser Ser Arg Asn Ser · 870 875 Leu Gly Arg Ala Pro Ser Leu Lys Arg Arg Ser Pro Ser Gly Glu Arg 890 Arg Ser Leu Leu Ser Gly Glu Gly Gln Glu Ser Gln Asp Glu Glu Glu 900 905 910 Ser Ser Glu Glu Glu Arg Ala Ser Pro Ala Gly Ser Asp His Arg His 920 Arg Gly Ser Leu Glu Arg Glu Ala Lys Ser Ser Phe Asp Leu Pro Asp 935 940 Thr Leu Gln Val Pro Gly Leu His Arg Thr Ala Ser Gly Arg Gly Ser 950 955 Ala Ser Glu His Gln Gly Leu Gln Trp Gln Val Gly Phe Arg Ala Pro 965 · 970 Gly Pro Gly Pro Ala Ala * 980 982

<210> 1269 <211> 708 <212> PRT <213> Homo sapiens

<400> 1269 Met Leu Ser Leu Arg Arg Cys Thr Ser Met Arg Leu Cys Leu Ser Ser Ser Leu Ala Ser Pro Cys Ser Thr Met Leu Ser Thr Val Val Leu Tyr 20 25 Lys Val Cys Asn Ser Phe Val Glu Met Gly Ser Ala Asn Val Gln Ala 40 Thr Asp Tyr Leu Lys Gly Val Ala Ser Leu Phe Val Val Ser Leu Gly 55 60 Gly Ala Ala Val Gly Leu Val Phe Ala Phe Leu Leu Ala Leu Thr Thr 70 75 Arg Phe Thr Lys Arg Val Arg Ile Ile Glu Pro Leu Leu Val Phe Leu 85 90 Leu Ala Tyr Ala Ala Tyr Leu Thr Ala Glu Met Ala Ser Leu Ser Ala 105 Ile Leu Ala Val Thr Met Cys Gly Leu Gly Cys Lys Lys Tyr Val Glu 120 125 Ala Asn Ile Ser His Lys Ser Arg Thr Thr Val Lys Tyr Thr Met Lys 135 140 Thr Leu Ala Ser Cys Ala Glu Thr Val Ile Phe Met Leu Leu Gly Ile 150 155 Ser Thr Val Asp Ser Ser Lys Trp Ala Trp Asp Ser Gly Leu Val Leu 165 170 Gly Thr Leu Ile Phe Ile Leu Phe Phe Arg Ala Leu Gly Val Val Leu 185 190 Gln Thr Trp Val Leu Asn Gln Phe Arg Leu Val Pro Leu Asp Lys Ile 200 Asp Gln Val Val Met Ser Tyr Gly Gly Leu Arg Gly Ala Val Ala Phe

	210					215					220				
Ala 225	Leu	Val	Ile	Leu	Leu 230	qaA	Arg	Thr	Lys	Val 235		Ala	ГÀв	qaA	Tyr 240
Phe	Val	Ala	Thr	Thr 245	Ile	Val	Val	Val	Phe 250	Phe	Thr	Val	Ile	Val 255	Gln
Gly	Leu	Thr	Ile 260	Lys	Pro	Leu	Val	Lys 265		Leu	Lys	Val	Lys 270	Arg	Ser
Glu	His	His 275	Lys	Pro	Thr	Leu	Asn 280	Gln	Glu	Leu	His	Glu 285	His	Thr	Phe
Asp	His 290	Ile	Leu	Ala	Ala	Val 295	Glu	Asp	Val	Val	Gly 300	His	His	Gly	Tyr
His 305	Tyr	Trp	Arg	Asp	Arg 310	Trp	Glu	Gln	Phe	Asp 315	_	Lys	Tyr	Leu	Ser 320
Gln	Leu	Leu	Met	Arg 325	Arg	Ser	Ala		Arg 330	Ile	Arg	Asp	Gln	Ile 335	Trp
qaA	Val	Tyr	Tyr 340	Arg	Leu	Asn	Ile	Arg 345		Ala	Ile	Ser	Phe 350	Val	Asp
		355			Leu		360					365			
•	370				Val	375					380				_
385					Ala 390	_		_		395			_		400
Arg	Ser	Gly	Arg	Asp 405	Arg	Glu	Asp	Ala	Val 410	Met	His	His	Leu	Leu 415	Cys
			420		Pro			425					430		
His	Phe	Ile 435	Ser	Glu	Asp	Ala	Gln 440	Glu	Arg	Gln	Asp	Lys 445	Glu	Val	Phe
	450			_	Arg	455					460			_	
465					Lys 470					475	-	_			480
				485	Val				490				_	495	
			500		Gln			505					510		
		515			Glu		520		,			525			
	530				Ile	535			_		540				
545					Ser 550					555					560
				565	Pro				570					575	
			580		Leu			585					590		
		595		_	Met		600	_				605			
	610				Ser	615		-			620				
Cys 625	Leu	Pro	Pro	His	Pro 630	Arg	Gly	Thr	Glu	Glu 635	Pro	Gln	Val	Pro	Leu 640
				645	Pro				650		•			655	
			660		Ser			665					670		
Gln	Gln	Glu 675	Leu	Gln	Pro	Leu	Met 680	Gly	His	Lys	Asp	His 685	Thr	His	Leu

Ser Pro Gly Thr Ala Thr Ser His Trp Cys Ile Gln Phe Asn Arg Gly 690 695 700

Ser Arg Leu * 705 707

<210> 1270 <211> 93 <212> PRT <213> Homo sapiens

<400> 1270 Met Leu Gln Ala Ala Leu Trp Cys Gly Ile Gly Leu Tyr Leu Val Thr 1 5 10 Leu Arg Leu Gly Val Glu Val Thr Pro Glu Ser Gln His Phe Gly Arg . 20 25 Pro Arg Arg Ala Asp His Leu Arg Pro Gly Gly Arg Gly Gln Ser Gly 35 40 Gln His Gly Glu Thr Pro Ser Leu Leu Glu Ile Gln Lys Ile Ser Trp 55 Met Trp Trp His Ile Pro Val Ile Pro Ala Thr Trp Glu Ala Glu Ala 70 75 Gly Glu Ser Leu Glu Arg Gly Arg Trp Arg Leu Gln

<210> 1271 <211> 648 <212> PRT <213> Homo sapiens

<400> 1271

Met Leu Trp Val Thr Gly Pro Val Leu Ala Val Ile Leu Ile Ile Leu 10 Ile Val Ile Ala Ile Leu Leu Phe Lys Arg Lys Arg Thr His Ser Pro 25 Ser Ser Lys Asp Glu Gln Ser Ile Gly Leu Lys Asp Ser Leu Leu Ala 40 His Ser Ser Asp Pro Val Glu Met Arg Arg Leu Asn Tyr Gln Thr Pro 60 55 Gly Met Arg Asp His Pro Pro Ile Pro Ile Thr Asp Leu Ala Asp Asn 70 75 Ile Glu Arg Leu Lys Ala Asn Asp Gly Leu Lys Phe Ser Gln Glu Tyr 85 90 Glu Ser Ile Asp Pro Gly Gln Gln Phe Thr Trp Glu Asn Ser Asn Leu 100 105 Glu Val Asn Lys Pro Lys Asn Arg Tyr Ala Asn Val Ile Ala Tyr Asp 120 His Ser Arg Val Ile Leu Thr Ser Ile Asp Gly Val Pro Gly Ser Asp 135 140 Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr Arg Lys Gln Asn Ala Tyr 150 155 Ile Ala Thr Gln Gly Pro Leu Pro Glu Thr Met Gly Asp Phe Trp Arg 170 Met Val Trp Glu Gln Arg Thr Ala Thr Val Val Met Met Thr Arg Leu

			180					185					190		
		195					200					205	;		
Thr	Glu 210		Сув	Gly	Leu	Ile 215		Val	Thr	Leu	Leu 220	_	Thr	Val	Glu
Leu 225		Thr	Tyr	Thr	Val 230		Thr	Phe	Ala	Leu 235		Lys	Ser	Gly	Ser 240
Ser	Glu	Lys	Arg	Glu 245		Arg	Gln	Phe	Gln 250		Met	Ala	Trp	Pro 255	_
His	Gly	Val	Pro 260	Glu	Tyr	Pro	Thr	Pro 265		Leu	Ala	Phe	Leu 270		Arg
Val	Lys	Ala 275	Сув	Asn	Pro	Leu	Asp 280		Gly	Pro	Met	Val 285		His	Сув
•	290		Val	_		295	_	_			300		, -		
Leu 305	Glu	Arg	Met	Lys	His 310	Glu	Lys	Thr	Val	Asp 315		Tyr	Gly	His	Val 320
Thr	Сув	Met	Arg	Ser 325		Arg	Asn	Tyr	Met 330	Val	Gln	Thr	Glu	Asp 335	
Tyr	Val	Phe	Ile 340	His	Glu	Ala	Leu	Leu 345		Ala	Ala	Thr	Cys 350	-	His
Thr	Glu	Val 355	Pro	Ala	Arg	Asn	Leu 360	Tyr	Ala	His	Ile	Gln 365	Lys	Leu	Gly
Gln	Val 370	Pro	Pro	Gly	Glu	Ser 375	Val	Thr	Ala	Met	Glu 380	Leu	Glu	Phe	Lys
385			Ser		390		•			395					400
			Asn	405					410					415	_
			Arg 420		_			425			-		430	•	
		435	Asn				440		_	_	_	445			
	450		Thr			455		,			460		-		_
465			Trp		470					475					480
			Met	485					490					495	
			Arg 500					505					510		_
		515	Gln				520			_		525	_		_
	530		Ser			535					540				
545	GII	GLĀ	Val	Pro	ьув 550	Inr	GIÀ	GIU	GIY	555	TTE	Asp	Pne	тте	260 GTÅ
	Val	His	Lys	Thr 565		Glu	Gln	Phe	Gly 570		Asp	Gly	Pro	Ile 575	
Val	His	Cys	Ser 580	Ala	Gly	Val	Gly	Arg 585		Gly	Val	Phe	Ile 590		Leu
Ser	Ile	Val 595	Leu	Glu	Arg	Met	Arg 600	Tyr	Glu	Gly	Val	Val 605	Asp	Met	Phe
Gln	Thr 610	Val	Lys	Thr	Leu	Arg 615	Thr	Gln	Arg	Pro	Ala 620		Val	Gln	Thr
Glu 625	Asp	Gln	Tyr	Gln	Leu 630	Сув	Tyr	Arg	Ala	Ala 635	Leu	Glu	Tyr	Leu	Gly 640
Ser	Phe	Asp	His	Tyr 645	Ala	Thr 647	*								

<210> 1272 <211> 109 <212> PRT <213> Homo sapiens

<400> 1272 Met Lys Ala Leu Cys Leu Leu Leu Pro Val Leu Gly Leu Leu Val Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile 20 25 Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly 35 45 40 Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro 55 Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser 70 Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met 85 90 Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro 100 105

<210> 1273 <211> 56 <212> PRT <213> Homo sapiens

<210> 1274 <211> 188 <212> PRT <213> Homo sapiens

55 Lys Lys Glu Gly Ser Asp Arg Gln Trp Asn Tyr Ala Cys Met Pro Thr Pro Gln Ser Leu Gly Glu Pro Thr Glu Cys Trp Trp Glu Glu Ile Asn 85 90 Arg Ala Gly Met Glu Trp Tyr Gln Thr Cys Ser Asn Asn Gly Leu Val 105 110 100 Ala Gly Phe Gln Ser Arg Tyr Phe Glu Ser Val Leu Asp Arg Glu Trp 120 125 Gln Phe Tyr Cys Cys Arg Tyr Ser Lys Arg Cys Pro Tyr Ser Cys Trp 135 140 Leu Thr Thr Glu Tyr Pro Gly His Tyr Gly Glu Glu Met Asp Met Ile 155 Ser Tyr Asn Tyr Asp Tyr Tyr Ile Arg Gly Ala Thr Thr His Phe Leu 165 170 Cys Ser Gly Lys Gly Ser Pro Ser Gly Ser Ser * 180 185

<210> 1275 <211> 81 <212> PRT <213> Homo sapiens

<400> 1275
Met Val Ala Leu Thr Ile Gln Thr Trp His Trp Leu Met Thr Val Ala
1 5 10 15
Glu Leu Leu Ser Leu Ala Cys Tyr Ile Ala Ser Leu Val Phe Leu His
20 25 30

Glu Phe Ile Asp Val Tyr Phe Ile Ala Thr Leu Ser Phe Leu Trp Lys
35 40 45

Val Ser Val Ile Thr Leu Val Ser Cys Leu Pro Leu Tyr Val Leu Lys
50
60

Tyr Leu Arg Arg Arg Phe Ser Pro Pro Ser Tyr Ser Lys Leu Thr Ser 65 70 75 80

<210> 1276 <211> 46 <212> PRT <213> Homo sapiens

<210> 1277

<211> 431 <212> PRT <213> Homo sapiens

<400> 1277 Met Ala Leu Leu Val Pro Leu Ala Leu Leu Val Ile Gln Ala His Leu 10 Val Leu Ser Val Gln Leu Glu Arg Val Val Thr Glu Glu Lys Val Ala 25 Leu Leu Ala Leu Leu Val Leu Pro Val Leu Leu Val Pro Glu Val Leu Leu Val Leu Lys Ala His Val Val Thr Lys Val Lys Gln Val Asn Val 55 Glu Leu Leu Ala Ser Lys Asp Ile Glu Asp Ser Leu Val Ile Gln Val 70 75 Pro Gln Val Leu Gln Ala Leu Leu Val Ser Arg Val Gln Ser Ala Val 85 90 Gln Asp Leu Gln Ala Pro Glu Asp Leu Leu Asp Pro Val Asp Leu Leu 105 110 Ala Lys Met Glu Pro Val Asp Ile Gln Val Pro Leu Asp His Gln Gly 120 125 Leu Glu Val Thr Glu Val Lys Glu Asp Leu Arg Ala Pro Gln Ala Thr 135 Gln Gly Asn Gln Ala Leu Leu Asp Leu Leu Val Pro Leu Val Leu Ala 150 155 Val Val Leu Glu Pro Leu Pro Leu Gly Leu Glu Val Lys Lys 170 Leu Ala Gly Phe Ala Pro Tyr Tyr Gly Asp Glu Pro Met Asp Phe Lys 180 185 Ile Asn Thr Asp Glu Ile Met Thr Ser Leu Lys Ser Val Asn Gly Gln 200 205 Ile Glu Ser Leu Ile Ser Pro Asp Gly Ser Arg Lys Asn Pro Ala Arg 215 Asn Cys Arg Asp Leu Lys Phe Cys His Pro Glu Leu Lys Ser Gly Glu 230 235 Tyr Trp Val Asp Pro Asn Gln Gly Cys Lys Leu Asp Ala Ile Lys Val 245 250 Phe Cys Asn Met Glu Thr Gly Glu Thr Cys Ile Ser Ala Asn Pro Leu 260 265 Asn Val Pro Arg Lys His Trp Trp Thr Asp Ser Ser Ala Glu Lys Lys 280 His Val Trp Phe Gly Glu Ser Met Asp Gly Gly Phe Gln Phe Ser Tyr 300 295 Gly Asn Pro Glu Leu Pro Glu Asp Val Leu Asp Val Gln Leu Ala Phe 305 310 315 Leu Arg Leu Leu Ser Ser Arg Ala Ser Gln Asn Ile Thr Tyr His Cys 330 325 Lys Asn Ser Ile Ala Tyr Met Asp Gln Ala Ser Gly Asn Val Lys Lys 345 Ala Leu Lys Leu Met Gly Ser Asn Glu Gly Glu Phe Lys Ala Glu Gly 360 Asn Ser Lys Phe Thr Tyr Thr Val Leu Glu Asp Gly Cys Thr Lys His 380 375 Thr Gly Glu Trp Ser Lys Thr Val Phe Glu Tyr Arg Thr Arg Lys Ala 395 390 Val Arg Leu Pro Ile Val Asp Ile Ala Pro Tyr Asp Ile Gly Gly Pro 410 Asp Gln Glu Phe Gly Val Asp Val Gly Pro Val Cys Phe Leu *

420 425 430

<210> 1278 <211> 53 <212> PRT <213> Homo sapiens

<210> 1279 <211> 73 <212> PRT <213> Homo sapiens

<210> 1280 <211> 51 <212> PRT <213> Homo sapiens

<210> 1281 <211> 144 <212> PRT <213> Homo sapiens

<400> 1281 Met Lys Ser Gly Ser Gly Gly Ser Pro Thr Ser Leu Trp Gly Leu 10 Leu Phe Leu Ser Ala Ala Leu Ser Leu Trp Pro Thr Ser Gly Glu Ile Cys Gly Pro Gly Ile Asp Ile Arg Asn Asp Tyr Gln Gln Leu Lys Arg Leu Glu Asn Cys Thr Val Ile Glu Gly Tyr Leu His Ile Leu Leu Ile . 60 55 Ser Lys Ala Glu Asp Tyr Arg Ser Tyr Arg Phe Pro Lys Leu Thr Val 70 75 Ile Thr Glu Tyr Leu Leu Phe Arg Val Ala Gly Leu Glu Ser Leu 90 Gly Asp Leu Phe Pro Asn Leu Thr Val Ile Arg Gly Trp Lys Leu Phe 105 Tyr Asn Tyr Ala Leu Val Ile Phe Glu Met Thr Asn Leu Lys Asp Ile 125 115 120 Gly Leu Tyr Asn Leu Arg Asn Ile Thr Arg Gly Gly His Gln Asp * 135

<210> 1282 <211> 267 <212> PRT

<213> Homo sapiens

<400> 1282 Met Gly Pro Pro Ser Ala Cys Pro His Arg Glu Cys Ile Pro Trp Gln 10 Gly Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Ala Pro Thr 20 25 Thr Ala Trp Leu Phe Ile Ala Ser Ala Pro Phe Glu Val Ala Glu Gly 40 Glu Asn Val His Leu Ser Val Val Tyr Leu Pro Glu Asn Leu Tyr Ser 55 Tyr Gly Trp Tyr Lys Gly Lys Thr Val Glu Pro Asn Gln Leu Ile Ala 75 70 Ala Tyr Val Ile Asp Asp Thr His Val Arg Thr Pro Gly Pro Ala Tyr 85 . 90 Ser Gly Arg Glu Thr Ile Ser Pro Ser Gly Asp Leu His Phe Gln Asn 100 105 Val Thr Leu Glu Asp Thr Gly Tyr Tyr Asn Leu Gln Val Thr Tyr Arg 120 125 Asn Ser Gln Ile Glu Gln Ala Ser His His Leu Arg Val Tyr Gln Val 135 140 Ser Gly Leu Thr Pro Pro Ser Lys Pro Ala Ala Pro Gln Ser Pro Arg 150 155 Arg Ala Pro Gly Val Leu Thr Cys His Thr Asn Asn Thr Gly Thr Ser 165 170 Phe Gln Trp Ile Phe Asn Asn Gln Arg Leu Gln Val Thr Lys Arg Met

<210> 1283 <211> 262 <212> PRT <213> Homo sapiens

<400> 1283 Met Leu Val Leu Val Leu Arg Val Ser Leu Ala Ala Leu Val Lys 10 Met Glu Leu Leu Val Arg Trp Ala Pro Val Ala Cys Leu Val Arg Glu 25 Val Ala Leu Glu Pro Leu Ala Leu Leu Val Leu Val Glu Met Met Val 35 40 Leu Leu Val Leu Pro Gly Pro Leu Val Pro Pro Ala Pro Leu Val Leu 55 60 Leu Ala Ser Leu Val Leu Leu Val Leu Arg Val Lys Leu Val Pro Lys 70 75 Gly Pro Glu Ala Leu Lys Val Pro Arg Val Cys Val Val Ser Leu Ala 90 Pro Leu Ala Leu Leu Val Leu Leu Ala Leu Leu Glu Thr Leu Val Leu 100 105 110 Arg Glu Ser Leu Val Leu Lys Val Pro Met Val Leu Leu Val Leu Leu 120 Val Leu Leu Ala Ser Leu Val Pro Glu Ala Pro Leu Asp Pro Arg Ala 135 140 Pro Ala Ala Leu Leu Val Pro Arg Val Thr Ala Val Asn Leu Val Leu 155 Leu Ala Ala Lys Glu Thr Leu Val Leu Arg Glu Ser Leu Ala Leu Leu 165 170 Val Phe Lys Asp Pro Leu Ala Leu Leu Glu Arg Lys Glu Ser Glu Glu 180 185 190 Leu Glu Val Asn Pro Asp Pro Leu Ala Cys Pro Asp Pro Leu Ala Ser 200 205 Val Val Asp Leu Val Ala Val Val Ser Leu Ala Gln Met Val Leu Leu 215 220 Val Pro Arg Val Pro Leu Val Asn Val Val Leu Leu Ala Leu Leu Ala 230 235 Pro Lys Asp Leu Leu Val Lys Leu Val Val Pro Val Lys Leu Val Cys 245 Leu Val Pro Arg Val * 260 261

<210> 1284

<211> 50 <212> PRT <213> Homo sapiens

<210> 1285 <211> 323 <212> PRT <213> Homo sapiens

<400> 1285 Met Leu Val Met Ala Pro Arg Thr Val Leu Leu Leu Ser Ala Ala 1 5 10 Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe 25 20 Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser 40 Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Pro Arg Glu Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly 70 75 Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Tyr Lys Ala Gln Ala Gln 85 90 Thr Asp Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser 100 105 Glu Ala Gly Ser His Thr Leu Gln Ser Met Tyr Gly Cys Asp Val Gly 120 Pro Asp Gly Arg Leu Leu Arg Gly His Asp Gln Tyr Ala Tyr Asp Gly 135 140 Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala 150 155 Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Glu 170 165 Ala Glu Gln Arg Arg Ala Tyr Leu Glu Gly Glu Cys Val Glu Trp Leu 185 Arg Arg Tyr Leu Glu Asn Gly Lys Asp Lys Leu Glu Arg Ala Asp Pro 205 200 Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu Ala Thr 215 220 Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr 235 230 Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu 245 250 Thr Arg Pro Ala Gly Asp Arg Thr Phe Gln Lys Val Gly Gln Leu Trp Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His

<210> 1286 <211> 306 <212> PRT <213> Homo sapiens

<400> 1286 Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu 5 10 Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Met Pro . 20 25 Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro 40 Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly 55 60 Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln 70 Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro 85 90 Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly 105 Val Pro Gly Pro Ala Gly Arg Glu Gly Pro Leu Gly Lys Gln Gly Asn 120 125 Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys 135 140 Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly 150 155 Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val 165 170 Pro Gly Asn Thr Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln . 185 Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly 195 200 Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val 215 220 Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His 230 235 Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn 250 Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys 265 Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gly Gln Leu 275 280 Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Pro Leu Ala Thr Ala Gly 295 300 Pro * 305

<210> 1287 <211> 299 <212> PRT <213> Homo sapiens

<400> 1287 Met Gly Arg Trp Ala Leu Asp Val Ala Phe Leu Trp Lys Ala Val Leu Thr Leu Gly Leu Val Leu Leu Tyr Tyr Cys Phe Ser Ile Gly Ile Thr 25 Phe Tyr Asn Lys Trp Leu Thr Lys Ser Phe His Phe Pro Leu Phe Met 40 Thr Met Leu His Leu Ala Val Ile Phe Leu Phe Ser Ala Leu Ser Arg 55 Ala Leu Val Gln Cys Ser Ser His Arg Ala Arg Val Val Leu Ser Trp 70 Ala Asp Tyr Leu Arg Arg Val Ala Pro Thr Ala Leu Ala Thr Ala Leu 85 90 Asp Val Gly Leu Ser Asn Trp Ser Phe Leu Tyr Val Thr Val Ser Leu 105 Tyr Thr Met Thr Lys Ser Ser Ala Val Leu Phe Ile Leu Ile Phe Ser 120 Leu Ile Phe Lys Leu Glu Glu Leu Arg Ala Ala Leu Val Leu Val Val 135 Leu Leu Ile Ala Gly Gly Leu Phe Met Phe Thr Tyr Lys Ser Thr Gln 155 150 Phe Asn Val Glu Gly Phe Ala Leu Val Leu Gly Ala Ser Phe Ile Gly 165 170 Gly Ile Arg Trp Thr Leu Thr Gln Met Leu Leu Gln Lys Ala Glu Leu 185 Gly Leu Gln Asn Pro Ile Asp Thr Met Phe His Leu Gln Pro Leu Met 200 Phe Leu Gly Leu Phe Pro Leu Phe Ala Val Phe Glu Gly Leu His Leu 215 220 Ser Thr Ser Glu Lys Ile Phe Arg Phe Gln Gly His Arg Ala Ala Pro 230 235 Ala Gly Thr Trp Gly Ala Ser Ser Leu Ala Gly Phe Ser Pro Leu Val 245 250 Trp Ala Ser Leu Ser Ser Ser Trp Ser Pro Glu Pro Pro Ala Ser Leu 260 265 270 . Ser Pro Leu Pro Ala Phe Leu Arg Lys Ser Ala Leu Cys Cys Trp Gln 280 285 Leu Ile Cys Trp Ala Ile Arg Ser Ala Ser 295

<210> 1288 <211> 161 <212> PRT <213> Homo sapiens

<400> 1288

Met Glu Ser Ala Leu Pro Ala Ala Gly Phe Leu Tyr Trp Val Gly Ala 1 5 10 15 Gly Thr Val Ala Tyr Leu Ala Leu Arg Ile Ser Tyr Ser Leu Phe Thr

20 25 Ala Leu Arg Val Trp Gly Val Gly Asn Glu Ala Gly Val Gly Pro Gly 40 Leu Gly Glu Trp Ala Val Val Thr Gly Ser Thr Asp Gly Ile Gly Lys 55 Ser Tyr Ala Glu Glu Leu Ala Lys His Gly Met Lys Val Val Leu Ile 70 75 Ser Arg Ser Lys Asp Lys Leu Asp Gln Val Ser Ser Glu Ile Lys Glu 90 Lys Phe Lys Val Glu Thr Arg Thr Ile Ala Val Asp Phe Ala Ser Glu 100 105 110 Asp Ile Tyr Asp Lys Ile Lys Thr Gly Leu Ala Gly Leu Glu Ile Gly 115 120 Ile Leu Val Asn Asn Val Gly Met Ser Tyr Glu Tyr Pro Glu Tyr Phe 135 140 Leu Asp Val Pro Asp Leu Asp Asn Val Ile Lys Lys Asn Asp Lys Tyr

<210> 1289 <211> 46 <212> PRT <213> Homo sapiens

<210> 1290 <211> 453 <212> PRT <213> Homo sapiens

<400> 1290 Met Thr Ser Lys Phe Ile Leu Val Ser Phe Ile Leu Ala Ala Leu Ser 10 Leu Ser Thr Thr Phe Ser Leu Gln Pro Asp Gln Gln Lys Val Leu Leu 20 Val Ser Phe Asp Gly Phe Arg Trp Asp Tyr Leu Tyr Lys Val Pro Thr
35 40 40 Pro His Phe His Tyr Ile Met Lys Tyr Gly Val His Val Lys Gln Val 55 Thr Asn Val Phe Ile Thr Lys Thr Tyr Pro Asn His Tyr Thr Leu Val 75 Thr Gly Leu Phe Ala Glu Asn His Gly Ile Val Ala Asn Asp Met Phe 90 Asp Pro Ile Arg Asn Lys Ser Phe Ser Leu Asp His Met Asn Ile Tyr 100 105

```
Asp Ser Lys Phe Trp Glu Glu Ala Thr Pro Ile Trp Ile Thr Asn Gln
                                          125
      115
                         120
Arg Ala Gly His Thr Ser Gly Ala Ala Met Trp Pro Gly Thr Asp Val
                     135
                                       140
Lys Ile His Lys Arg Phe Pro Thr His Tyr Met Pro Tyr Asn Glu Ser
                 150
                                    155
Val Ser Phe Glu Asp Arg Val Ala Lys Ile Ile Glu Trp Phe Thr Ser
              165
                                170
Lys Glu Pro Ile Asn Leu Gly Leu Leu Tyr Trp Glu Asp Pro Asp Asp
                            185
Met Gly His His Leu Gly Pro Asp Ser Pro Leu Met Gly Pro Val Ile
                                        205
       195
                         200
Ser Asp Ile Asp Lys Lys Leu Gly Tyr Leu Ile Gln Met Leu Lys Lys
                    215
                                       220
Ala Lys Leu Trp Asn Thr Leu Asn Leu Ile Ile Thr Ser Asp His Gly
         230
                                   235
Met Thr Gln Cys Ser Glu Glu Arg Leu Ile Glu Leu Asp Gln Tyr Leu
                             250
              245
Asp Lys Asp His Tyr Thr Leu Ile Asp Gln Ser Pro Val Ala Ala Ile
                 265
Leu Pro Lys Glu Gly Lys Phe Asp Glu Val Tyr Glu Ala Leu Thr His
       275
                        280
                                  285
Ala His Pro Asn Leu Thr Val Tyr Lys Lys Glu Asp Val Pro Glu Arg
                  295
Trp His Tyr Lys Tyr Asn Ser Arg Ile Gln Pro Ile Ile Ala Val Ala
                  310
Asp Glu Gly Trp His Ile Leu Gln Asn Lys Ser Asp Asp Phe Leu Leu
              325 330
Gly Asn His Gly Tyr His Asn Ala Leu Ala Asp Met His Pro Ile Phe
          340
                            345
                                              350
Leu Ala His Gly Pro Ala Phe Arg Lys Asn Phe Ser Lys Glu Ala Met
                        360
Asn Ser Thr Asp Leu Tyr Pro Leu Leu Cys His Leu Leu Asn Ile Thr
                     375
                                       380
Ala Met Pro His Asn Gly Ser Phe Trp Asn Val Gln Asp Leu Leu Asn
    390
                          395
Ser Ala Met Pro Arg Val Val Pro Tyr Thr Gln Ser Thr Ile Leu Leu
              405
                               410
Pro Gly Ser Val Lys Pro Ala Glu Tyr Asp Gln Glu Gly Ser Tyr Pro
                            425
          420
Tyr Phe Ile Gly Val Ser Leu Gly Ser Ile Ile Val Ile Val Phe Phe
      435
                        440
Cys Asn Phe His *
   450
       452
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<210> 1291

<211> 78

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(78)

<223> Xaa = any amino acid or nothing
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<400> 1291
Met Leu Ser Val Thr Ala Phe Ile Leu Ala Glu Thr Val Leu Ala Ser

<210> 1292 <211> 416 <212> PRT <213> Homo sapiens

· <400> 1292

Met Val Leu Trp Ile Leu Trp Arg Pro Phe Gly Phe Ser Gly Arg Phe 10 Leu Lys Leu Glu Ser His Ser Ile Thr Glu Ser Lys Ser Leu Ile Pro . 20 25 Val Ala Trp Thr Ser Leu Thr Gln Met Leu Leu Glu Ala Pro Gly Ile 35 40 Phe Leu Leu Gly Gln Arg Lys Arg Phe Ser Thr Met Pro Glu Thr Glu 55 60 Thr His Glu Arg Glu Thr Glu Leu Phe Ser Pro Pro Ser Asp Val Arg 75 Gly Met Thr Lys Leu Asp Arg Thr Ala Phe Lys Lys Thr Val Asn Ile 90 Pro Val Leu Lys Val Arg Lys Glu Ile Val Ser Lys Leu Met Arg Ser 100 105 Leu Lys Arg Ala Ala Leu Gln Arg Pro Gly Ile Arg Arg Val Ile Glu 120 125 Asp Pro Glu Asp Lys Glu Ser Arg Leu Ile Met Leu Asp Pro Tyr Lys 135 140 Ile Phe Thr His Asp Ser Phe Glu Lys Ala Glu Leu Ser Val Leu Glu 150 155 Gln Leu Asn Val Ser Pro Gln Ile Ser Lys Tyr Asn Leu Glu Leu Thr 165 170 Tyr Glu His Phe Lys Ser Glu Glu Ile Leu Arg Ala Val Leu Pro Glu 180 185 Gly Gln Asp Val Thr Ser Gly Phe Ser Arg Ile Gly His Ile Ala His 200 Leu Asn Leu Arg Asp His Gln Leu Pro Phe Lys His Leu Ile Gly Gln 215 220 Val Met Ile Asp Lys Asn Pro Gly Ile Thr Ser Ala Val Asn Lys Ile 230 235 Asn Asn Ile Asp Asn Met Tyr Arg Asn Phe Gln Met Glu Val Leu Ser 245 250 Gly Glu Gln Asn Met Met Thr Lys Val Arg Glu Asn Asn Tyr Thr Tyr 265 Glu Phe Asp Phe Ser Lys Val Tyr Trp Asn Pro Arg Leu Ser Thr Glu 280 His Ser Arg Ile Thr Glu Leu Leu Lys Pro Gly Asp Val Leu Phe Asp 295 300 Val Phe Ala Gly Val Gly Pro Phe Ala Ile Pro Val Ala Lys Lys Asn 315

<210> 1293 <211> 113 <212> PRT <213> Homo sapiens

<210> 1294 <211> 57 <212> PRT <213> Homo sapiens

<210> 1295 <211> 68 <212> PRT <213> Homo sapiens

<400> 1295

<210> 1296 <211> 66 <212> PRT <213> Homo sapiens

<400> 1296

<210> 1297 <211> 57 <212> PRT <213> Homo sapiens

<400> 1297

<210> 1298

<211> 235 <212> PRT <213> Homo sapiens

<400> 1298 Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser 10 Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys 20 25 Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe 40 Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro 55 Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val 70 Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu 85 90 Arg Val Arg Met Val Asn Leu Gln Val Glu Asp Ser Gly Leu Tyr Gln 100 105 . 110 Cys Val Ile Tyr Gln Pro Pro Lys Glu Pro His Met Leu Phe Asp Arg 120 125 Ile Arg Leu Val Val Thr Lys Gly Phe Ser Gly Thr Pro Gly Ser Asn 135 Glu Asn Ser Thr Gln Asn Val Tyr Lys Ile Pro Pro Thr Thr Lys 145 150 155 160 Ala Leu Cys Pro Leu Tyr Thr Thr Pro Arg Thr Val Thr Gln Ala Pro 165 170 Pro Lys Ser Thr Ala Asp Val Ser Thr Pro Asp Ser Glu Ile Asn Leu 185 Thr Asn Val Thr Asp Ile Ile Arg Val Pro Val Phe Asn Ile Val Ile 200 205 Leu Leu Ala Gly Gly Phe Leu Ser Lys Ser Leu Val Phe Ser Val Leu 215 Phe Ala Val Thr Leu Arg Ser Phe Val Pro * 230

<210> 1299

<211> 64

<212> PRT

<213> Homo sapiens

<210> 1300` <211> 80

<212> PRT <213> Homo sapiens

<400> 1300

<210> 1301

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1301

 Met
 Arg
 Phe
 Arg
 Ala
 Glu
 Pro
 Lys
 Ser
 Arg
 Pro
 Leu
 Pro
 Ala
 Leu
 Cys

 His
 Val
 Leu
 Ile
 Ala
 Cys
 Ile
 Val
 Phe
 Arg
 Trp
 Ala
 Phe
 Ala
 Gln
 Pro

 Leu
 Pro
 Ser
 Ser
 Arg
 Ser
 Tyr
 Arg
 Ser
 Ser
 Gly
 Glu
 Phe
 Pro
 Arg
 Ser

 Pro
 Ser
 Phe
 Lys
 Lys
 Thr
 Lys
 Thr
 Pro
 Ser
 Trp
 Gly
 Glu
 Phe
 Pro
 Arg
 Val

 Fro
 Ser
 Phe
 Lys
 Trp
 Het
 Leu
 Arg
 Ala
 Asn
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 Met
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 Ala
 Asn
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 Met
 Trp
 Arg
 Ala
 Asn
 Leu
 Arg
 Met
 Trp

<210> 1302

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1302

 Met
 Asp
 His
 Cys
 Gly
 Ala
 Leu
 Phe
 Leu
 Cys
 Leu
 Leu
 Thr
 Leu
 Thr
 Leu
 Thr
 Leu
 Thr
 Leu
 Leu</th

Val Pro Gln Ala Gly Gly Gln His Ala Arg Gly Gln His Ala Met Gln
100 105 110

Phe Pro Ala Glu Leu Thr Arg Asp Ala Cys Lys Thr Arg Pro Arg Glu
115 120 125

Leu Arg Leu Ile Cys Ile Tyr Phe Ser Asn Thr His Phe Phe Lys
130 135 140 143

<210> 1303 <211> 60 <212> PRT <213> Homo sapiens

<210> 1304 <211> 56 <212> PRT <213> Homo sapiens

<210> 1305 <211> 63 <212> PRT <213> Homo sapiens

50 55 60 62

<210> 1306 <211> 138 <212> PRT <213> Homo sapiens

<400> 1306 Met Gln Asn Arg Thr Gly Leu Ile Leu Cys Ala Leu Ala Leu Leu Met 10 Gly Phe Leu Met Val Cys Leu Gly Ala Phe Phe Ile Ser Trp Gly Ser 20 25 Ile Phe Asp Cys Gln Gly Ser Leu Ile Ala Ala Tyr Leu Leu Leu Pro 35 40 Leu Gly Phe Val Ile Leu Leu Ser Gly Ile Phe Trp Ser Asn Tyr Arg 55 Gln Val Thr Glu Ser Lys Gly Val Leu Arg His Met Leu Arg Gln His 75 Leu Ala His Gly Ala Leu Pro Val Ala Thr Val Asp Arg Pro Asp Phe 85 90 Tyr Pro Pro Ala Tyr Glu Glu Ser Leu Glu Val Glu Lys Gln Ser Cys 105 110 Pro Ala Glu Arg Glu Ala Pro Arg His Ser Ser Thr Ser Ile Tyr Arg 120 Asp Gly Pro Gly Ile Pro Gly Trp Lys * 135 137

<210> 1307 <211> 64 <212> PRT <213> Homo sapiens

| Met | Met | Ala | Ile | Lys | Pro | Thr | Ile | Leu | Val | Thr | Gln | Gly | Leu | Ile | Leu | Leu

<210> 1308 <211> 65 <212> PRT <213> Homo sapiens

<400> 1308

PCT/US01/02687 WO 01/54477

Met Pro Cys Ser Gly Ser Ser Val Gln Thr Phe Arg Pro Leu Leu Ile 1 5 10 Phe His Asn Val Thr Phe Phe Ile Leu Pro Val Lys Cys Phe Asn Ala 20 25 Leu Ile Asn Val Leu Glu Arg Pro Phe Trp Gln Leu Leu Gly Glu Ile 40 Gly Glu Glu Tyr Arg Gly Ser Glu Asp Trp Leu Gly Gly Ser Phe Arg 55 60

<210> 1309 <211> 75 <212> PRT <213> Homo sapiens

<400> 1309 Met Arg Ile Trp His Arg Trp Leu Leu Val Arg Ile Leu Phe Pro Ala 5 10 Pro Gly Leu Gln Thr Ala Thr Phe Ser Val Cys Phe His Val Ala Glu 20 25 Ser Glu Leu Trp His Leu Leu Cys Phe Phe Phe Phe Leu Ala Leu Leu 35 40 45 Pro Pro Arg Trp Lys Ala Arg Gly Pro Ile Trp Val His Gly Thr Leu 55 Gly Phe Arg Val Gly Arg Asn Phe Leu Ala 70

<210> 1310 <211> 46 <212> PRT <213> Homo sapiens

<400> 1310 Met Lys Leu Gly Asp Val Phe Val Lys Leu Leu Val Ser Leu Ala Gly 10 Glu Ile Leu Leu Ala Pro Leu Val Ser Ala Ser Gly Met Gly Pro Ala 25 Gly Val Glu Ala Leu Glu Glu Val Ser Ala Leu Ser Val 35

40

<210> 1311 <211> 105 <212> PRT <213> Homo sapiens

<400> 1311 Met Tyr Trp Val Thr Val Ile Thr Leu Ile Tyr Gly Tyr Tyr Ala Trp 10 Val Gly Phe Trp Pro Glu Ser Ile Pro Tyr Gln Asn Leu Gly Pro Leu

<210> 1312 <211> 114 <212> PRT <213> Homo sapiens

<400> 1312 Met Lys Gly Lys Trp Cys Cys Ser Leu Leu Cys Gln Ser Pro Gln Val 10 Gln Thr Ala Leu Val Cys Pro Leu Ser Leu Ser Leu Gly Pro Pro Gly 20 25 Pro Gln Cys Pro Leu Leu Trp Leu Gly Gln Glu Asp Leu Pro Asp Ile 40 Ala Arg Cys Ile Thr Asp Asp Cys Ser Gln Leu Pro Gln Ala Pro Ala 55 Ser Leu Ala Ser Cys Phe Phe Pro Gln Ser Cys Leu Leu Ile Ser Ile 70 75 His Leu Ser Met Gly Tyr Ser Trp Thr Leu Gly Leu Gly Val Gly Ile 85 90 Arg Leu Leu Pro Thr Lys Gly Val Lys Val Thr His Phe Pro Tyr His Ala 113

<210> 1313 <211> 88 <212> PRT <213> Homo sapiens

<210> 1314 <211> 65 <212> PRT <213> Homo sapiens

<400> 1314

 Met
 Gly
 Arg
 Leu
 Trp
 Ile
 Phe
 Leu
 Gln
 Leu
 Cys
 Gln
 Ser
 Leu
 Gly

 Leu
 Ser
 Thr
 Val
 Val
 Ser
 Ser
 Arg
 Pro
 Val
 Ala
 Cys
 Leu
 Glu
 Ser
 Val

 Pro
 Gly
 Met
 Cys
 Met
 Cys
 Met
 Pro
 Leu
 Asn
 Tyr
 Arg
 Gly
 Ser

 Asn
 Phe
 Ser
 Glu
 Thr
 Asp
 Val
 Trp
 Met
 Asp
 Leu
 Ser
 Ala
 His
 Leu

 Asn
 Phe
 Ser
 Glu
 Thr
 Asp
 Val
 Trp
 Met
 Asp
 Leu
 Ser
 Ala
 His
 Leu

 Asn
 Phe
 Ser
 Glu
 Thr
 Asp
 Val
 Trp
 Met
 Asp
 Leu
 Ser
 Eu
 Ser
 Asp
 Leu
 Ser
 Ser
 Asp
 Leu
 Ser
 Ser
 Asp
 Leu
 Ser
 Asp
 Le

<210> 1315 <211> 71 <212> PRT <213> Homo sapiens

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<210> 1316 <211> 114 <212> PRT <213> Homo sapiens

70 Gly Leu Ala Ala Leu Pro Gly Ser Gly Ala Phe Ser Val Ile Pro Val 85 90 Ser Leu Leu Pro Val Pro Glu Gly Leu Gly Arg Thr Tyr Leu Tyr 105 Ser * 113

<210> 1317 <211> 91 <212> PRT

<213> Homo sapiens

<400> 1317 Met Met Val Trp Asn Leu Phe Pro Cys Phe Pro Pro Leu Leu Leu 10 Gln Phe Ile Asp Cys Gln Gln Ser Ser Glu Ile Glu Gln Gly Phe Thr 25 Arg Ser Leu Leu Gly His Pro Ile Phe Phe Cys Pro Asp Pro Cys Trp 35 40 Gln Ser Cys Met Asn Cys Val Ile Leu Leu Ser Ala Phe Phe Leu 50 55 60 Phe Asp Lys Met Asp Ile Lys Asn Ser Cys Cys Ala Lys Val Ser Ser 75 Leu Leu Gln Glu Glu Asn Gln Phe Phe Phe 85

<210> 1318 <211> 65 <212> PRT <213> Homo sapiens

<400> 1318 Met Leu Pro Leu Ile Ser Ser Ile Lys Ile Leu Lys Leu Tyr Tyr 10 Phe Ser Val Trp Gly Trp Gly Phe Phe Phe Phe Glu Thr Glu Phe Arg 25 Ser Cys Cys Pro Gly Trp Ser Ala Met Val Arg Ser Gln Leu Thr Ala 40 Thr Ser Thr Ser Arg Val Gln Ala Ile Leu Leu Pro Gln Pro Pro Glu 55 60

<210> 1319 <211> 46 <212> PRT <213> Homo sapiens

<400> 1319

Met Val Thr Leu Leu Ile Ala Lys Gln Phe Trp Ile Phe Thr Val Asp 1 5 5 10 10 15 Leu His Leu Ser Asp Tyr Val Leu Glu Leu Ser Arg Tyr Leu Ile Asn 20 25 30 Ala Cys Phe Tyr Ser Pro Cys Ser Gln Pro Ile Glu Lys *

<210> 1320 <211> 47 <212> PRT <213> Homo sapiens

<210> 1321 <211> 55 <212> PRT <213> Homo sapiens

<210> 1322 <211> 301 <212> PRT <213> Homo sapiens

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Phe Ser Thr Arg Ser Asn Tyr Asp Gly Ile Leu Pro Gln Thr Phe Ala
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Gln Val Asn Asn Leu Leu Gln Thr Phe Ala Glu Val Lys Thr Lys Leu
     100 105
Lys Pro Asn Ser Ser Glu Asn Thr Val Thr Lys Lys Gln Glu Gly Thr
          120
Ser Leu Lys Asn Ser His Asn Gln Glu Ile Thr Val Phe Ser Ser Ser
 130 135
                          140
His Leu Pro Gln Pro Ser Arg His Gln Glu Ile Trp Ser Ile Leu Glu
    150
                       155
Ser Val Trp Ile Thr Ile Tyr Gln Asn Ser Thr Asp Val Phe Gln Arg
           165
                          170
Leu Gly Ser Asn Ser Ala Leu Thr Thr Ser Asn Ile Ala Ser Phe Glu
                185
Glu Ala Phe Ile Cys Leu Gln Lys Leu Met Ala Ala Val Arg Asp Ile
             200
                                    205
Leu Glu Gly Ile Gln Arg Ile Leu Ala Pro Asn Ser Asn Tyr Gln Asp
                         220
        215
Val Glu Thr Leu Tyr Asn Phe Leu Ile Lys Tyr Glu Val Asn Lys Asn
              230 235
Val Lys Phe Thr Ala Gln Glu Ile Tyr Asp Cys Val Ser Gln Thr Glu
      245 250 255
Tyr Arg Glu Lys Leu Thr Ile Gly Cys Arg Gln Leu Val Glu Met Glu
  260 265 270
Tyr Thr Met Gln Gln Cys Asn Ala Ser Val Tyr Met Glu Ala Lys Asn
   275 280 285
Arg Gly Trp Cys Glu Asp Met Leu Asn Tyr Arg Ile
                  295
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<210> 1323 <211> 85 · <212> PRT <213> Homo sapiens

<210> 1324 <211> 46 <212> PRT <213> Homo sapiens

<210> 1325 <211> 87 <212> PRT <213> Homo sapièns

<400> 1325 Met Gly Leu Ser Lys Ala Phe Leu Ile Thr Arg Thr Val Phe Leu Ile 1 5 10 Ser Ser Leu Ser Phe Tyr Ser Phe Leu Gly Phe Pro Ser Leu Cys Phe 20 25 Thr Gly Ser Cys Met Leu Ser Thr Leu Phe Ile Arg Ala Leu Ser Ile 35 40 Leu Val Ile Ile Val Leu Asn Ser Arg Ser Asp Lys Ser Asn Thr Pro 55 60 Ala Ile Ser Glu Ser Gly Ser Asp Ala Cys Ser Phe Ser Ser Asn Phe 70 Val Phe Cys Leu Leu Val * 85 86

<210> 1326 <211> 69 · <212> PRT <213> Homo sapiens

<210> 1327 <211> 103 <212> PRT <213> Homo sapiens <221> misc feature

<222> (1)...(103) <223> Xaa = any amino acid or nothing

<400> 1327 Met Val Gly Phe Gly Thr Asn Arg Arg Ala Gly Arg Leu Pro Ser Leu 10 Val Leu Val Val Leu Leu Val Val Ile Val Val Leu Ala Phe Asn Tyr 20 25 Trp Ser Ile Ser Ser Arg His Val Leu Leu Glu Glu Glu Val Ala Glu 40 Leu Gln Gly Arg Val Gln Arg Ala Glu Val Ala Leu Trp Arg Val Gly 55 60 Gly Arg Asn Cys Asp Leu Leu Leu Val Val Gly Thr Arg Ser Arg Arg 70 75 Ile Glu Glu Arg Gly Ala Asp Tyr Ser Arg Leu Ser Arg Arg Leu Gln 85 90 Xaa Lys Glu Gly Leu Val Asn 100

<210> 1328 <211> 52 <212> PRT <213> Homo sapiens

<210> 1329 <211> 204 <212> PRT <213> Homo sapiens

<400> 1329 Met Cys Thr Arg Asn Leu Ala Leu Leu Phe Ala Pro Ser Val Phe Gln 10 Thr Asp Gly Arg Gly Glu His Glu Val Arg Val Leu Gln Glu Leu Ile 20 25 Asp Gly Tyr Ile Ser Val Phe Asp Ile Asp Ser Asp Gln Val Ala Gln 40 Ile Asp Leu Glu Val Ser Leu Ile Thr Thr Trp Lys Asp Val Gln Leu 55 60 Ser Gln Ala Gly Asp Leu Ile Met Glu Val Tyr Ile Glu Gln Gln Leu 70 75 Pro Asp Asn Cys Val Thr Leu Lys Val Ser Pro Thr Leu Thr Ala Glu 90

Glu Leu Thr Asn Gln Val Leu Glu Met Arg Gly Thr Ala Ala Gly Met 100 105 Asp Leu Trp Val Thr Phe Glu Ile Arg Glu His Gly Glu Leu Glu Arg 115 120 125 Pro Leu His Pro Lys Glu Lys Val Leu Glu Gln Ala Leu Gln Trp Cys 135 140 Gln Leu Pro Glu Pro Cys Ser Ala Ser Leu Leu Leu Lys Lys Val Pro 150 155 Leu Ala Gln Ala Gly Cys Leu Phe Thr Gly Ile Arg Arg Glu Ser Pro 165 170 Arg Val Gly Leu Phe Ala Val Phe Val Arg Ser His Leu Ala Cys Trp 180 185 Gly Ser Arg Phe Gln Glu Arg Phe Phe Leu Val Ala 195 200

<210> 1330 <211> 199 <212> PRT <213> Homo sapiens

<400> 1330 Met Pro Val Pro Ala Leu Cys Leu Leu Trp Ala Leu Ala Met Val Thr 5 10 Arg Pro Ala Ser Ala Ala Pro Met Gly Gly Pro Glu Leu Ala Gln His 20 25 Glu Glu Leu Thr Leu Leu Phe His Gly Thr Leu Gln Leu Gly Gln Ala Leu Asn Gly Val Tyr Arg Thr Thr Glu Gly Arg Leu Thr Lys Ala Arg Asn Ser Leu Gly Leu Tyr Gly Arg Thr Ile Glu Leu Leu Gly Gln Glu 70 75 Val Ser Arg Gly Arg Asp Ala Ala Gln Glu Leu Arg Ala Ser Leu Leu 85 90 Glu Thr Gln Met Glu Glu Asp Ile Leu Gln Leu Gln Ala Glu Ala Thr 105 Ala Glu Val Leu Gly Glu Val Ala Gln Ala Gln Lys Val Leu Arg Asp 120 125 Ser Val Gln Arg Leu Glu Val Gln Leu Arg Ser Ala Trp Leu Gly Pro 135 140 Ala Tyr Arg Glu Phe Glu Val Leu Lys Ala His Ala Asp Lys Gln Ser 150 155 His Ile Leu Trp Ala Leu Thr Gly His Val Gln Arg Gln Arg Glu 170 165 175 Met Val Ala Gln Gln His Arg Leu Arg Gln Ile Gln Glu Arg Leu His 180 185 Thr Ala Ala Leu Pro Ala * 195 198

<210> 1331 <211> 81 <212> PRT <213> Homo sapiens

<210> 1332

<211> 73

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(73)

<223> Xaa = any amino acid or nothing

70

<400> 1332

<210> 1333

<211> 52

<212> PRT

<213> Homo sapiens

<400> 1333

<210> 1334

<211> 65 <212> PRT <213> Homo sapiens

55

<210> 1335 <211> 112 <212> PRT

50

<213> Homo sapiens

<400> 1335 Met Leu His Pro Glu Thr Ser Pro Gly Arg Gly His Leu Leu Ala Val 1 5 10 Leu Leu Ala Leu Leu Gly Thr Ala Trp Ala Glu Val Trp Pro Pro Gln 20 25 Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg Lys Glu Ser 40 Phe Leu Leu Ser Leu His Asn Arg Leu Arg Ser Trp Val Gln Pro Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser Asp Ser Leu Ala Gln 70 75 Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly Ile Pro Thr Pro Ser Leu 85 90 Ala Ser Gly Leu Trp Arg Thr Leu Gln Val Gly Trp Asn Met Gln Leu

<210> 1336 <211> 105 <212> PRT <213> Homo sapiens

<210> 1337 <211> 57 <212> PRT <213> Homo sapiens

<210> 1338 <211> 59 <212> PRT <213> Homo sapiens

<210> 1339 <211> 50 <212> PRT <213> Homo sapiens

Tyr *

<210> 1340 <211> 81

<212> PRT

<213> Homo sapiens

<400> 1340

 Met
 Pro
 Leu
 Ala
 Cys
 Thr
 Gly
 Leu
 Asn
 Thr
 Gln
 Arg
 Phe
 Ser
 Tyr
 Leu
 Leu
 15

 Arg
 Asp
 Leu
 Phe
 Leu
 Pro
 Trp
 Gly
 Leu
 Cys
 Ile
 Leu
 Tyr
 Ser
 Leu
 Tyr
 Ser
 Leu
 Leu
 Tyr
 Ser
 Ser
 Leu
 Leu
 Leu
 Tyr
 Ser
 Leu
 Leu

<210> 1341 <211> 60 <212> PRT <213> Homo sapiens

<400> 1341

<210> 1342 <211> 49 <212> PRT <213> Homo sapiens

<400> 1342

 Met Leu Ser Leu Phe Ile Phe Leu Arg Phe Leu Pro Leu Gly Phe Cys

 1
 5
 10
 15

 Trp Lys Glu Leu His Pro Glu Ala Glu Gln Ser Glu Lys Val Asp Phe
 30

 Arg Lys Pro Trp Tyr Leu Thr Gly His Ala Ala Ser Leu Gly Ala Asp

 35
 40
 45
 48

<210> 1343 <211> 70 <212> PRT <213> Homo sapiens

<210> 1344 <211> 99 <212> PRT <213> Homo sapiens

<210> 1345 <211> 112 <212> PRT <213> Homo sapiens

 Cys
 Gln
 Thr
 Glu
 Trp
 Lys
 Ser
 Gly
 Gln
 Arg
 Trp
 Glu
 Leu
 Glu
 Leu
 Leu
 Glu
 Leu
 Arg
 Trp
 Glu
 Gln
 Thr
 Leu
 Ser
 Gln
 Gln
 Thr
 Leu
 Ser
 Gln
 Thr
 Gln
 Thr
 Leu
 Leu
 Leu
 Arg
 Trp
 Gln
 Thr
 Gln
 G

<210> 1346 <211> 360 <212> PRT <213> Homo sapiens

Thr Pro Phe Thr Glu Asp Thr Pro Ser Val Gly Gln Arg Leu Leu Asn 40 Ser Val Leu Asn Thr Leu Ile Met Ile Ser Val Ile Val Val Met Thr 55 Ile Phe Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys Phe Ile His 75 Gly Trp Leu Ile Met Ser Ser Leu Met Leu Leu Phe Leu Phe Thr Tyr 85 90 Ile Tyr Leu Gly Glu Val Leu Lys Thr Tyr Asn Val Ala Met Asp Tyr 100 105 Pro Thr Leu Leu Thr Val Trp Asn Phe Gly Ala Val Gly Met Val 120 Cys Ile His Trp Lys Gly Pro Leu Val Leu Gln Gln Ala Tyr Leu Ile 135 140 Met Ile Ser Ala Leu Met Ala Leu Val Phe Ile Lys Tyr Leu Pro Glu 150 155 Trp Ser Ala Trp Val Ile Leu Gly Ala Ile Ser Val Tyr Asp Leu Val 165 170 Ala Val Leu Cys Pro Lys Gly Pro Leu Arg Met Leu Val Glu Thr Ala 180 185 Gln Glu Arg Asn Glu Pro Ile Phe Pro Ala Leu Ile Tyr Ser Ser Ala 200 205 Met Val Trp Thr Val Gly Met Ala Lys Leu Asp Pro Ser Ser Gln Gly 220 Ala Leu Gln Leu Pro Tyr Asp Pro Glu Met Glu Glu Asp Ser Tyr Asp 230 235 Ser Phe Gly Glu Pro Ser Tyr Pro Glu Val Phe Glu Pro Pro Leu Thr 245 250 Gly Tyr Pro Gly Glu Glu Leu Glu Glu Glu Glu Glu Arg Gly Val Lys 260 265 Leu Gly Leu Gly Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala 280 Ala Ala Thr Gly Ser Gly Asp Trp Asn Thr Thr Leu Ala Cys Phe Val

<210> 1347 <211> 84 <212> PRT <213> Homo sapiens

<400> 1347 Met Ile Leu Ser Leu Tyr Tyr Lys Leu Phe Gly Lys Leu Ala Val Ala 5 10 Thr Ile Glu Ile Leu His Cys Leu Cys Tyr Ile Glu Phe Val Ile Ile 20 25 30 Phe Lys Gly Phe Lys Lys Ile Pro Ile Cys Phe Phe Ser Phe Leu Phe 40 Ser Phe Val Pro His His Leu Asn Tyr Leu Gly Lys Tyr His Ser Ser 55 60 Lys Phe Glu Tyr Cys Leu Ser Asn Lys Lys Cys Glu Arg Tyr Glu - 65 70 . 75 Glu Glu Arg * 83

<210> 1348 <211> 65 <212> PRT <213> Homo sapiens

<210> 1349 <211> 58 <212> PRT <213> Homo sapiens

<210> 1350

<211> 60

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (60)

<223> Xaa = any amino acid or nothing

<400> 1350

<210> 1351 <211> 56 <212> PRT

<213> Homo sapiens

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<210> 1352 <211> 701 <212> PRT <213> Homo sapiens

<400> 1352 Met Glu Pro Leu Cys Pro Leu Leu Leu Val Gly Phe Ser Leu Pro Leu 10 Ala Arg Ala Leu Arg Gly Asn Glu Thr Thr Ala Asp Ser Asn Glu Thr 25 Thr Thr Thr Ser Gly Pro Pro Asp Pro Gly Ala Ser Gln Pro Leu Leu 40 Ala Trp Leu Leu Pro Leu Leu Leu Leu Leu Leu Val Leu Leu Leu 55 Ala Ala Tyr Phe Phe Arg Phe Arg Lys Gln Arg Lys Ala Val Val Ser 70 75 Thr Ser Asp Lys Lys Met Pro Asn Gly Ile Leu Glu Glu Gln Glu Gln 85 90 Gln Arg Val Met Leu Leu Ser Arg Ser Pro Ser Gly Pro Lys Lys Tyr 105 Phe Pro Ile Pro Val Glu His Leu Glu Glu Glu Ile Arg Ile Arg Ser 120 Ala Asp Asp Cys Lys Gln Phe Arg Glu Glu Phe Asn Ser Leu Pro Ser 130 135 140 Gly His Ile Gln Gly Thr Phe Glu Leu Ala Asn Lys Glu Glu Asn Arg 150 155 Glu Lys Asn Arg Tyr Pro Asn Ile Leu Pro Asn Asp His Ser Arg Val 170 Ile Leu Ser Gln Leu Asp Gly Ile Pro Cys Ser Asp Tyr Ile Asn Ala 185 Ser Tyr Ile Asp Gly Tyr Lys Glu Lys Asn Lys Phe Ile Ala Ala Gln 200 205 Gly Pro Lys Gln Glu Thr Val Asn Asp Phe Trp Arg Met Val Trp Glu 215 220 Gln Lys Ser Ala Thr Ile Val Met Leu Thr Asn Leu Lys Glu Arg Lys 230 235 Glu Glu Lys Cys His Gln Tyr Trp Pro Asp Gln Gly Cys Trp Thr Tyr 245 250 Gly Asn Ile Arg Val Cys Val Glu Asp Cys Val Val Leu Val Asp Tyr 260 265 Thr Ile Arg Lys Phe Cys Ile Gln Pro Gln Leu Pro Asp Gly Cys Lys 280 Ala Pro Arg Leu Val Ser Gln Leu His Phe Thr Ser Trp Pro Asp Phe 295 Gly Val Pro Phe Thr Pro Ile Gly Met Leu Lys Phe Leu Lys Lys Val 310 · 315 Lys Thr Leu Asn Pro Val His Ala Gly Pro Ile Val Val His Cys Ser 330 325 Ala Gly Val Gly Arg Thr Gly Thr Phe Ile Val Ile Asp Ala Met Met 340 345 Ala Met Met His Ala Glu Gln Lys Val Asp Val Phe Glu Phe Val Ser Arg Ile Arg Asn Gln Arg Pro Gln Met Val Gln Thr Asp Met Gln Tyr 375 Thr Phe Ile Tyr Gln Ala Leu Leu Glu Tyr Tyr Leu Tyr Gly Asp Thr 390 395 Glu Leu Asp Val Ser Ser Leu Glu Lys His Leu Gln Thr Met His Gly 410 Thr Thr Thr His Phe Asp Lys Ile Gly Leu Glu Glu Glu Phe Arg Lys 425 Leu Thr Asn Val Arg Ile Met Lys Glu Asn Met Arg Thr Gly Asn Leu 440 Pro Ala Asn Met Lys Lys Ala Arg Val Ile Gln Ile Ile Pro Tyr Asp 455

Phe Asn Arg Val Ile Leu Ser Met Lys Arg Gly Gln Glu Tyr Thr Asp 470 475 Tyr Ile Asn Ala Ser Phe Ile Asp Gly Tyr Arg Gln Lys Asp Tyr Phe 485 490 Ile Ala Thr Gln Gly Pro Leu Ala His Thr Val Glu Asp Phe Trp Arg 500 - 505 Met Ile Trp Glu Trp Lys Ser His Thr Ile Val Met Leu Thr Glu Val 520 Gln Glu Arg Glu Gln Asp Lys Cys Tyr Gln Tyr Trp Pro Thr Glu Gly 535 Ser Val Thr His Gly Glu Ile Thr Ile Glu Ile Lys Asn Asp Thr Leu 550 555 Ser Glu Ala Ile Ser Ile Arg Asp Phe Leu Val Thr Leu Asn Gln Pro 565 570 Gln Ala Arg Gln Glu Glu Gln Val Arg Val Val Arg Gln Phe His Phe 585 His Gly Trp Pro Glu Ile Gly Ile Pro Ala Glu Gly Lys Gly Met Ile 600 Asp Leu Ile Ala Ala Val Gln Lys Gln Gln Gln Gln Thr Gly Asn His 615 620 Pro Ile Thr Val His Cys Ser Ala Gly Ala Gly Arg Thr Gly Thr Phe 630 635 Ile Ala Leu Ser Asn Ile Leu Glu Arg Val Lys Ala Glu Gly Leu Leu 650 Asp Val Phe Gln Ala Val Lys Ser Leu Arg Leu Gln Arg Pro His Met Val Gln Thr Leu Glu Gln Tyr Glu Phe Cys Tyr Lys Val Val Gln Asp 680 Phe Ile Asp Ile Phe Ser Asp Tyr Ala Asn Phe Lys * 695

<210> 1353 <211> 49

<212> PRT

<213> Homo sapiens

<400> 1353

 Met Ala Phe Leu Tyr His Val Ala Tyr Val Leu Val Cys Met Leu Gly

 1
 5

 Leu Phe Cys His Glu Phe Phe Tyr Ser Phe Leu Leu Phe Glu Ser Val

 20
 25

 Tyr Arg His Gln Thr Leu Leu Asn Asp Ile Pro Cys Val Lys Leu Met

 35
 40

<210> 1354

<211> 58

<212> PRT

<213> Homo sapiens

<400> 1354

Met Ser Val Cys Lys Tyr Thr Val Tyr Gly Phe Phe Ile Phe Ala Phe

<210> 1355 <211> 4261 <212> PRT

<213> Homo sapiens

<400> 1355 Met Leu Ser Ala Ile Leu Leu Leu Gln Leu Trp Asp Ser Gly Ala 10 Gln Glu Thr Asp Asn Glu Arg Ser Ala Gln Gly Thr Ser Ala Pro Leu 20 25 Leu Pro Leu Gln Arg Phe Gln Ser Ile Ile Cys Arg Lys Asp Ala 40 Pro His Ser Glu Gly Asp Met His Leu Leu Ser Gly Pro Leu Ser Pro 55 60 Asn Glu Ser Phe Leu Arg Tyr Leu Thr Leu Pro Gln Asp Asn Glu Leu 70 75 . 80 Ala Ile Asp Leu Arg Gln Thr Ala Val Val Met Ala His Leu Asp 85 90 Arg Leu Ala Thr Pro Cys Met Pro Pro Leu Cys Ser Ser Pro Thr Ser 100 105 His Lys Gly Ser Leu Gln Glu Val Ile Gly Trp Gly Leu Ile Gly Trp 120 125 Lys Tyr Tyr Ala Asn Val Ile Gly Pro Ile Gln Cys Glu Gly Leu Ala 135 140 Asn Leu Gly Val Thr Gln Ile Ala Cys Ala Glu Lys Arg Phe Leu Ile 150 155 Leu Ser Arg Asn Gly Arg Val Tyr Thr Gln Ala Tyr Asn Ser Asp Thr 165 170 175 Leu Ala Pro Gln Leu Val Gln Gly Leu Ala Ser Arg Asn Ile Val Lys 180 185 Ile Ala Ala His Ser Asp Gly His His Tyr Leu Ala Leu Ala Ala Thr 200 Gly Glu Val Tyr Ser Trp Gly Cys Gly Asp Gly Gly Arg Leu Gly His 215 220 Gly Asp Thr Val Pro Leu Glu Glu Pro Lys Val Ile Ser Ala Phe Ser 230 235 Gly Lys Gln Ala Gly Lys His Val Val His Ile Ala Cys Gly Ser Thr 245 250 Tyr Ser Ala Ala Ile Thr Ala Glu Gly Glu Leu Tyr Thr Trp Gly Arg 265 270 Gly Asn Tyr Gly Arg Leu Gly His Gly Ser Ser Glu Asp Glu Ala Ile 280 285 Pro Met Leu Val Ala Gly Leu Lys Gly Leu Lys Val Ile Asp Val Ala 295 300 Cys Gly Ser Gly Asp Ala Gln Thr Leu Ala Val Thr Glu Asn Gly Gln 310 315 Val Trp Ser Trp Gly Asp Gly Asp Tyr Gly Lys Leu Gly Arg Gly Gly 325 330

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Ser Asp Gly Cys Lys Thr Pro Lys Leu Ile Glu Lys Leu Gln Asp Leu
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Asp Val Val Lys Val Arg Cys Gly Ser Gln Phe Ser Ile Ala Leu Thr
                            360
Lys Asp Gly Gln Val Tyr Ser Trp Gly Lys Gly Asp Asn Gln Arg Leu
                        375
Gly His Gly Thr Glu Glu His Val Arg Tyr Pro Lys Leu Leu Glu Gly
                    390
                                       395
Leu Gln Gly Lys Lys Val Ile Asp Val Ala Ala Gly Ser Thr His Cys
               405
                                   410
Leu Ala Leu Thr Glu Asp Ser Glu Val His Ser Trp Gly Ser Asn Asp
           420
                               425
Gln Cys Gln His Phe Asp Thr Leu Arg Val Thr Lys Pro Glu Pro Ala
                           440
Ala Leu Pro Gly Leu Asp Thr Lys His Ile Val Gly Ile Ala Cys Gly
                       455
                                           460
Pro Ala Gln Ser Phe Ala Trp Ser Ser Cys Ser Glu Trp Ser Ile Gly
                470
                           475
Leu Arg Val Pro Phe Val Val Asp Ile Cys Ser Met Thr Phe Glu Gln
               485
                                490
Leu Asp Leu Leu Arg Gln Val Ser Glu Gly Met Asp Gly Ser Ala
                                505
Asp Trp Pro Pro Pro Gln Glu Lys Glu Cys Val Ala Val Ala Thr Leu
                           520
Asn Leu Leu Arg Leu Gln Leu His Ala Ala Ile Ser His Gln Val Asp
                       535
Pro Glu Phe Leu Gly Leu Gly Leu Gly Ser Ile Leu Leu Asn Ser Leu
                    550
                                       555
Lys Gln Thr Val Val Thr Leu Ala Ser Ser Ala Gly Val Leu Ser Thr
                                   570
Val Gln Ser Ala Ala Gln Ala Val Leu Gln Ser Gly Trp Ser Val Leu
           580
                               585
Leu Pro Thr Ala Glu Glu Arg Ala Arg Ala Leu Ser Ala Leu Leu Pro
                           600
                                              605
Cys Ala Val Ser Gly Asn Glu Val Asn Ile Ser Pro Gly Arg Arg Phe
                       615
                                          620
Met Ile Asp Leu Leu Val Gly Ser Leu Met Ala Asp Gly Gly Leu Glu
                    630
                                       635
Ser Ala Leu His Ala Ala Ile Thr Ala Glu Ile Gln Asp Ile Glu Ala
               645
                                  650
Lys Lys Glu Ala Gln Lys Glu Lys Glu Ile Asp Glu Gln Glu Ala Asn
           660
                               665
Ala Ser Thr Phe His Arg Ser Arg Thr Pro Leu Asp Lys Asp Leu Ile
                           680
Asn Thr Gly Ile Cys Glu Ser Ser Gly Lys Gln Cys Leu Pro Leu Val
                       695
Gln Leu Ile Gln Gln Leu Leu Arg Asn Ile Ala Ser Gln Thr Val Ala
                   710
                                       715
Arg Leu Lys Asp Val Ala Arg Arg Ile Ser Ser Cys Leu Asp Phe Glu
                725
                                  730
Gln His Ser Arg Glu Arg Ser Ala Ser Leu Asp Trp Leu Leu Arg Phe
           740
                               745
Gln Arg Leu Leu Ile Ser Lys Leu Tyr Pro Gly Glu Ser Ile Gly Gln
                           760
Thr Ser Asp Ile Ser Ser Pro Glu Leu Met Gly Val Gly Ser Leu Leu
                        775
                                           780
Lys Lys Tyr Thr Ala Leu Leu Cys Thr His Ile Gly Asp Ile Leu Pro
                    790
                                       795
Val Ala Ala Ser Ile Ala Ser Thr Ser Trp Arg His Phe Ala Glu Val
```

					805					810					815	
	Ala	Tyr	Ile	Val 820	Glu	Gly	Asp	Phe	Thr 825	Gly		Leu	Leu	Pro 830	Glu	
	Val	Val	Ser 835	Ile	Val	Leu	Leu	Leu 840			Asn	Ala	Asp 845	Leu		Gln
		850			Val		855					860				_
	865				Leu	870					875	-				880
					Gly 885					890					895	_
				900	Glu				905					910		
			915		Gly			920				_	925	-		_
		930			Phe		935					940				
	945				Gly	950					955					960
					Thr 965 Asp	•				970					975	
				980	Leu				985				_	990	_	
			995		Ser		1	L000				:	1005			
		1010			501		1015	niu		DCI		1020	nea	Der	FIO	vaı
;	1025					1030				:	1035				:	1040
	Leu	Gln	Thr		Gln 1045	Ile	His	Tyr		Tyr 1050		Glu	Glu	_	Asp 1055	Glu
	Asp	His			Ser	Pro	Gly			Pro		Ser				Leu
	Сув		His 1075	Arg	Arg	Ala					Ser				Leu	Gln
	3	L090			Asn	1	1095				:	1100	-	-		
:	1105					L110				:	1115					1120
	Met	Phe	Pro		Glu 1125	His	Pro	Val		Glu 1130	Val	Gly	Arg		Leu 1135	Leu
	Cys	Cys			Lys	His	Glu				His	Val				Leu
	Val				Ala	Leu				Gln	Val				Thr	Leu
		Lys L170	Ser	Val	Val		Val 175	Cys	Arg	Val		Tyr 180	Gln	Ala	Lys	Cys
-	1185					.190				J	L 195				1	200
	Cys	Ala	Pro		Ile 1205	Glu	Arg	Leu		Phe L210	Leu	Phe	Asn		Leu .215	Arg
	Pro	Ala			Asn	Asp	Leu				Ser	Lys				Leu
	Ser				Arg	Trp				Ala	Gln				Arg	Glu
	3	L250			Arg	1	Pro .255	Lys			1	Ser .260	Met			
:	Glu 1265	ГÀÈ	Ile	Gly	Asn 1	Glu .270	Glu	Ser	Asp		Glu .275	Glu	Ala	Cys		Leu .280

Pro His Ser Pro Ile Asn Val Asp Lys Arg Pro Ile Ala Ile Lys Ser 1285 1290 1295 Pro Lys Asp Lys Trp Gln Pro Leu Leu Ser Thr Val Thr Gly Val His 1300 1305 1310 Lys Tyr Lys Trp Leu Lys Gln Asn Val Gln Gly Leu Tyr Pro Gln Ser 1320 1325 Pro Leu Leu Ser Thr Ile Ala Glu Phe Ala Leu Lys Glu Glu Pro Val 1330 1335 1340 Asp Val Glu Lys Met Arg Lys Cys Leu Leu Lys Gln Leu Glu Arg Ala 1350 1355 1360 Glu Val Arg Leu Glu Gly Ile Asp Thr Ile Leu Lys Leu Ala Ser Lys 1365 1370 1375 Asn Phe Leu Leu Pro Ser Val Gln Tyr Ala Met Phe Cys Gly Trp Gln 1380 1385 1390 Arg Leu Ile Pro Glu Gly Ile Asp Ile Gly Glu Pro Leu Thr Asp Cys 1395 1400 1405 Leu Lys Asp Val Asp Leu Ile Pro Pro Phe Asn Arg Met Leu Leu Glu 1410 1415 1420 Val Thr Phe Gly Lys Leu Tyr Ala Trp Ala Val Gln Asn Ile Arg Asn 1425 1430 1435 1440 Val Leu Met Asp Ala Ser Ala Thr Phe Lys Glu Leu Gly Ile Gln Pro 1445 1450 Val Pro Leu Gln Thr Ile Thr Asn Glu Asn Pro Ser Gly Pro Ser Leu 1460 1465 1470 Gly Thr Ile Pro Gln Ala Arg Phe Leu Leu Val Met Leu Ser Met Leu 1480 1485 Thr Leu Gln His Gly Ala Asn Asn Leu Asp Leu Leu Leu Asn Ser Gly 1495 1500 Met Leu Ala Leu Thr Gln Thr Ala Leu Arg Leu Ile Gly Pro Ser Cys 1510 1515 Asp Asn Val Glu Glu Asp Met Asn Ala Ser Ala Gln Gly Ala Ser Ala 1525 1530 Thr Val Leu Glu Glu Thr Arg Lys Glu Thr Ala Pro Val Gln Leu Pro 1540 1545 1550 Val Ser Gly Pro Glu Leu Ala Ala Met Met Lys Ile Gly Thr Arg Val 1555 1560 1565 Met Arg Gly Val Asp Trp Lys Trp Gly Asp Gln Asp Gly Pro Pro Pro 1570 1575 1580 Gly Leu Gly Arg Val Ile Gly Glu Leu Gly Glu Asp Gly Trp Ile Arg 1585 1590 1595 Val Gln Trp Asp Thr Gly Ser Thr Asn Ser Tyr Arg Met Gly Lys Glu 1605 1610 Gly Lys Tyr Asp Leu Lys Leu Ala Glu Leu Pro Ala Ala Ala Gln Pro 1625 1630 Ser Ala Glu Asp Ser Asp Thr Glu Asp Asp Ser Glu Ala Glu Gln Thr 1640 1635 Glu Arg Asn Ile His Pro Thr Ala Met Met Phe Thr Ser Thr Ile Asn 1650 1655 1660 Leu Leu Gln Thr Leu Cys Leu Ser Ala Gly Val His Ala Glu Ile Met 1670 1675 Gln Ser Glu Ala Thr Lys Thr Leu Cys Gly Leu Leu Arg Met Leu Val 1685 1690 1695 Glu Ser Gly Thr Thr Asp Lys Thr Ser Ser Pro Asn Arg Leu Val Tyr 1705 1710 Arg Glu Gln His Arg Ser Trp Cys Thr Leu Gly Phe Val Arg Ser Ile 1715 1720 1725 Ala Leu Thr Pro Gln Val Cys Gly Ala Leu Ser Ser Pro Gln Trp Ile 1740 1735 Thr Leu Leu Met Lys Val Val Glu Gly His Ala Pro Phe Thr Ala Thr

1745					1750					1755					1760
Ser	Leu	Gln	_		Ile		Ala		His 1770	Leu		Gln			Leu
Pro	Ser		Asp 1780	Lys	Thr	Glu	_	Ala 1785	Arg	Asp	Met	_	Сув 1790		Val
Glu		Leu 1795	Phe	Asp	Phe		Gly 1800		Leu	Leu		Thr 1805		Ser	Ser
	Val 1810		Leu	Leu		Glu 1815		Thr	Leu		Arg 1820		Arg	Val	Arg
Pro 1825		Ala	Ser		Thr 1830		Thr	His	Ser	Ser 1835		Leu	Ala		Glu 1840
Val	Val	Ala		Leu 1845	Arg	Thr	Leu		Ser 1850	Leu	Thr	Gln	_	Asn 1855	Gly
Leu	Ile		Lys 1860	Tyr	Ile	Asn	•	Gln 1865	Leu	Arg	Ser		Thr 1870		Ser
Phe		Gly 1875	Arg	Pro	Ser		Gly 1880	Ala	Gln	Leu		Asp 1885	_	Phe	Pro
	Ser 1890	Glu	Asn	Pro		Val 1895	_	Gly	Leu		Ala 1900	Val	Leu	Ala	Val
1905					1910					1915				:	1920
			:	1925					Arg 1930					1935	_
		1	L940			_	:	1945	Thr	_	_	;	1950		
	•	1955	_			;	1960		Ala			1965			
:	1970				:	1975			Trp		1980				
1985			_	:	1990					1995				2	2000
Ala	Phe	Ala		Gln 2005	Val	Asp	Leu		Leu 2010	Leu	Arg	аұЭ		Gln 2015	Leu
		2	2020				2	2025	Ala			2	2030		_
Lys		Arg 2035	Gln	Ile	Leu		Gln 2040	Pro	Ala	Val		Glu 2045	Thr	Gly	Thr
	His 2050	Thr	Asp	Asp	-	Ala 2055	Val	Val	Ser		qaA 0 0 0 0 1	Leu	Gly	qaA	Met
Ser 2065	Pro	Glu	Gly			Pro	Pro	Met	Ile		Leu	Gln	Gln		
	Ser	Ala			2070 Pro	Ser	Pro		Lys 2090	075 Ala	Ile	Phe			080 Gln
Glu	Leu				Ala	Leu			Сув	Gln	Cys				Glu
Ser				Ser	Ser				Glu	Asp	_			Ser	Glu
			Pro	Val				His	Ile				Arg	Val	Lys
Arg	Arg	Lys	Gln	Ser			Pro	Ala	Leu			Val	Val	Gln	Leu
2145					150					155					160
			2	165		_	_	2	Ile 2170				2	175	
Leu	Thr	-	Ala 180	Ser	Gly	Asn		Ser 185	Ser	Leu	Pro	_	Val 190	Glu	Ala
	2	195				2	200		Asp		2	205			
	Asp 2210	Ala	Asp	Thr		Ser 215	Asp	Glu	Tyr		Asp 220	Glu	Glu	Val '	Val

Glu Asp Val Asp Asp Ala Ala Tyr Ser Met Ser Thr Gly Ala Val Val 2225 2230 2235 2240 Thr Glu Ser Gln Thr Tyr Lys Lys Arg Ala Asp Phe Leu Ser Asn Asp 2245 2250 Asp Tyr Ala Val Tyr Val Arg Glu Asn Ile Gln Val Gly Met Met Val 2265 2260 Arg Cys Cys Arg Ala Tyr Glu Glu Val Cys Glu Gly Asp Val Gly Lys 2275 2280 2285 Val Ile Lys Leu Asp Arg Asp Gly Leu His Asp Leu Asn Val Gln Cys 2295 2300 Asp Trp Gln Gln Lys Gly Gly Thr Tyr Trp Val Arg Tyr Ile His Val 2305 2310 2315 Glu Leu Ile Gly Tyr Pro Pro Pro Ser Ser Ser His Ile Lys Ile 2325 2330 2335 Gly Asp Lys Val Arg Val Lys Ala Ser Val Thr Thr Pro Lys Tyr Lys 2340 2345 2350 Trp Gly Ser Val Thr His Gln Ser Val Gly Val Val Lys Ala Phe Ser 2360 Ala Asn Gly Lys Asp Ile Ile Val Asp Phe Pro Gln Gln Ser His Trp 2370 2375 2380 Thr Gly Leu Leu Ser Glu Met Glu Leu Val Pro Ser Ile His Pro Gly 2390 2395 Val Thr Cys Asp Gly Cys Gln Met Phe Pro Ile Asn Gly Ser Arg Phe 2405 2410 2415 Lys Cys Arg Asn Cys Asp Asp Phe Asp Phe Cys Glu Thr Cys Phe Lys 2420 2425 2430 Thr Lys Lys His Asn Thr Arg His Thr Phe Gly Arg Ile Asn Glu Pro 2440 2445 Gly Gln Ser Ala Val Phe Cys Gly Arg Ser Gly Lys Gln Leu Lys Arg 2450 2455 2460 Cys His Ser Ser Gln Pro Gly Met Leu Leu Asp Ser Trp Ser Arg Met 2465 2470 2475 Val Lys Ser Leu Asn Val Ser Ser Ser Val Asn Gln Ala Ser Arg Leu 2485 2490 2495 Ile Asp Gly Ser Glu Pro Cys Trp Gln Ser Ser Gly Ser Gln Gly Lys 2505 2510 His Trp Ile Arg Leu Glu Ile Phe Pro Asp Val Leu Val His Arg Leu 2520 2525 Lys Met Ile Val Asp Pro Ala Asp Ser Ser Tyr Met Pro Ser Leu Val 2535 2540 Val Val Ser Gly Gly Asn Ser Leu Asn Asn Leu Ile Glu Leu Lys Thr 2550 2555 Ile Asn Ile Asn Pro Ser Asp Thr Thr Val Pro Leu Leu Asn Asp Tyr 2565 2570 Thr Glu Tyr His Arg Tyr Ile Glu Ile Ala Ile Lys Gln Cys Arg Ser 2580 2585 2590 Ser Gly Ile Asp Cys Lys Ile His Gly Leu Ile Leu Leu Gly Arg Ile 2600 Arg Ala Glu Glu Asp Leu Ala Ala Val Pro Phe Leu Ala Ser Asp 2615 2620 Asn Glu Glu Glu Asp Glu Lys Gly Asn Ser Gly Ser Leu Ile Arg 2630 2635 Lys Lys Ala Ala Gly Leu Glu Ser Ala Ala Thr Ile Arg Thr Lys Val 2645 2650 Phe Val Trp Gly Leu Asn Asp Lys Asp Gln Leu Gly Gly Leu Lys Gly 2660 2665 2670 Ser Lys Ile Lys Val Pro Ser Phe Ser Glu Thr Leu Ser Ala Leu Asn 2675 2680 2685 Val Val Gln Val Ala Gly Gly Ser Lys Ser Leu Phe Ala Val Thr Val

2700 2690 2695 Glu Gly Lys Val Tyr Ala Cys Gly Glu Ala Thr Asn Gly Arg Leu Gly 2715 2720 2710 Leu Gly Ile Ser Ser Gly Thr Val Pro Ile Pro Arg Gln Ile Thr Ala 2725 2730 Leu Ser Ser Tyr Val Val Lys Lys Val Ala Val His Ser Gly Gly Arg 2740 2745 2750 His Ala Thr Ala Leu Thr Val Asp Gly Lys Val Phe Ser Trp Gly Glu 2755 2760 2765 Gly Asp Asp Gly Lys Leu Gly His Phe Ser Arg Met Asn Cys Asp Lys 2775 2780 Pro Arg Leu Ile Glu Ala Leu Lys Thr Lys Arg Ile Arg Asp Ile Ala 2790 2795 Cys Gly Ser Ser His Ser Ala Ala Leu Thr Ser Ser Gly Glu Leu Tyr 2805 2810 2815 Thr Trp Gly Leu Gly Glu Tyr Gly Arg Leu Gly His Gly Asp Asn Thr 2820 2825 2830 Thr Gln Leu Lys Pro Lys Met Val Lys Val Leu Leu Gly His Arg Val 2835 2840 2845 Ile Gln Val Ala Cys Gly Ser Arg Asp Ala Gln Thr Leu Ala Leu Thr 2855 2860 Asp Glu Gly Leu Val Phe Ser Trp Gly Asp Gly Asp Phe Gly Lys Leu 2870 2875 Gly Arg Gly Gly Ser Glu Gly Cys Asn Ile Pro Gln Asn Ile Glu Arg 2885 2890 Leu Asn Gly Gln Gly Val Cys Gln Ile Glu Cys Gly Ala Gln Phe Ser 2905 2900 2910 Leu Ala Leu Thr Lys Ser Gly Val Val Trp Thr Trp Gly Lys Gly Asp 2915 2920 2925 Tyr Phe Arg Leu Gly His Gly Ser Asp Val His Val Arg Lys Pro Gln 2935 2940 ... 2930 Val Val Glu Gly Leu Arg Gly Lys Lys Ile Val His Val Ala Val Gly 2945 2950 2955 2960 Ala Leu His Cys Leu Ala Val Thr Asp Ser Gly Gln Val Tyr Ala Trp 2965 2970 2975 Gly Asp Asn Asp His Gly Gln Gln Gly Asn Gly Thr Thr Thr Val Asn 2985 2990 Arg Lys Pro Thr Leu Val Gln Gly Leu Glu Gly Gln Lys Ile Thr Arg 2995 3000 3005 Val Ala Cys Gly Ser Ser His Ser Val Ala Trp Thr Thr Val Asp Val 3010 3015 3020 Ala Thr Pro Ser Val His Glu Pro Val Leu Phe Gln Thr Ala Arg Asp 3030 3035 3040 Pro Leu Gly Ala Ser Tyr Leu Gly Val Pro Ser Asp Ala Asp Ser Ser 3050 3055 Ala Ala Ser Asn Lys Ile Ser Gly Ala Ser Asn Ser Lys Pro Asn Arg 3065 Pro Ser Leu Ala Lys Ile Leu Leu Ser Leu Asp Gly Asn Leu Ala Lys 3080 Gln Gln Ala Leu Ser His Ile Leu Thr Ala Leu Gln Ile Met Tyr Ala 3095 3100 Arg Asp Ala Val Val Gly Ala Leu Met Pro Ala Ala Met Ile Ala Pro 3110 3115 Val Glu Cys Pro Ser Phe Ser Ser Ala Ala Pro Ser Asp Ala Ser Ala 3125 3130 3135 Met Ala Ser Pro Met Asn Gly Glu Glu Cys Met Leu Ala Val Asp Ile 3140 3145 3150 Glu Asp Arg Leu Ser Pro Asn Pro Trp Gln Glu Lys Arg Glu Ile Val 3155 3160

Ser Ser Glu Asp Ala Val Thr Pro Ser Ala Val Thr Pro Ser Ala Pro 3170 3175 3180 Ser Ala Ser Ala Arg Pro Phe Ile Pro Val Thr Asp Asp Leu Gly Ala 3190 3195 Ala Ser Ile Ile Ala Glu Thr Met Thr Lys Thr Lys Glu Asp Val Glu 3205 3210 3215 Ser Gln Asn Lys Ala Ala Gly Pro Glu Pro Gln Ala Leu Asp Glu Phe 3220 3225 3230 Thr Ser Leu Leu Ile Ala Asp Asp Thr Arg Val Val Asp Leu Leu 3240 3245 Lys Leu Ser Val Cys Ser Arg Ala Gly Asp Arg Gly Arg Asp Val Leu 3250 3255 3260 Ser Ala Val Leu Ser Gly Met Gly Thr Ala Tyr Pro Gln Val Ala Asp 3270 3275 Met Leu Glu Leu Cys Val Thr Glu Leu Glu Asp Val Ala Thr Asp 3285 3290 3295 Ser Gln Ser Gly Arg Leu Ser Ser Gln Pro Val Val Val Glu Ser Ser 3300 3305 . 3310 His Pro Tyr Thr Asp Asp Thr Ser Thr Ser Gly Thr Val Lys Ile Pro 3315 3320 3325 Gly Ala Glu Gly Leu Arg Val Glu Phe Asp Arg Gln Cys Ser Thr Glu 3330 3335 3340 Arg Arg His Asp Pro Leu Thr Val Met Asp Gly Val Asn Arg Ile Val 3350 3355 3360 Ser Val Arg Ser Gly Arg Glu Trp Ser Asp Trp Ser Ser Glu Leu Arg 3365 3370 Ile Pro Gly Asp Glu Leu Lys Trp Lys Phe Ile Ser Asp Gly Ser Val 3380 3385 3390 Asn Gly Trp Gly Trp Arg Phe Thr Val Tyr Pro Ile Met Pro Ala Ala 3400 3405 Gly Pro Lys Glu Leu Leu (Ser Asp Arg Cys Val Leu Ser Cys Pro Ser 3415 3420 Met Asp Leu Val Thr Cys Leu Leu Asp Phe Arg Leu Asn Leu Ala Ser 3430 3435 Asn Arg Ser Ile Val Pro Arg Leu Ala Ala Ser Leu Ala Ala Cys Ala 3445 3450 Gln Leu Ser Ala Leu Ala Ala Ser His Arg Met Trp Ala Leu Gln Arg 3460 3465 3470 Leu Arg Lys Leu Leu Thr Thr Glu Phe Gly Gln Ser Ile Asn Ile Asn 3475 3480 3485 Arg Leu Leu Gly Glu Asn Asp Gly Glu Thr Arg Ala Leu Ser Phe Thr 3490 3495 3500 Gly Ser Ala Leu Ala Leu Val Lys Gly Leu Pro Glu Ala Leu Gln 3505 3510 3515 Arg Gln Phe Glu Tyr Glu Asp Pro Ile Val Arg Gly Gly Lys Gln Leu 3525 3530 3535 Leu His Ser Pro Phe Phe Lys Val Leu Val Ala Leu Ala Cys Asp Leu 3540 3545 3550 Glu Leu Asp Thr Leu Pro Cys Cys Ala Glu Thr His Lys Trp Ala Trp 3560 3565 Phe Arg Arg Tyr Cys Met Ala Ser Arg Val Ala Val Ala Leu Asp Lys 3575 3580 Arg Thr Pro Leu Pro Arg Leu Phe Leu Asp Glu Val Ala Lys Lys Ile 3590 3595 Arg Glu Leu Met Ala Asp Ser Glu Asn Met Asp Val Leu His Glu Ser 3605 3610 3615 His Asp Ile Phe Lys Arg Glu Gln Asp Glu Gln Leu Val Gln Trp Met 3625 Asn Arg Arg Pro Asp Asp Trp Thr Leu Ser Ala Gly Gly Ser Gly Thr

3635 . . 3640 Ile Tyr Gly Trp Gly His Asn His Arg Gly Gln Leu Gly Gly Ile Glu 3650 3655 3660 Gly Ala Lys Val Lys Val Pro Thr Pro Cys Glu Ala Leu Ala Thr Leu 3665 3670 3675 Arg Pro Val Gln Leu Ile Gly Gly Glu Gln Thr Leu Phe Ala Val Thr 3685 3690 3695 Ala Asp Gly Lys Leu Tyr Ala Thr Gly Tyr Gly Ala Gly Gly Arg Leu 3700 3705 3710 Gly Ile Gly Gly Thr Glu Ser Val Ser Thr Pro Thr Leu Leu Glu Ser 3715 3720 3725 Ile Gln His Val Phe Ile Lys Lys Val Ala Val Asn Ser Gly Gly Lys 3735 3740 His Cys Leu Ala Leu Ser Ser Glu Gly Glu Val Tyr Ser Trp Gly Glu 3745 3750 3755 3760 Ala Glu Asp Gly Lys Leu Gly His Gly Asn Arg Ser Pro Cys Asp Arg 3765 3770 Pro Arg Val Ile Glu Ser Leu Arg Gly Ile Glu Val Val Asp Val Ala 3780 3785 3790 Ala Gly Gly Ala His Ser Ala Cys Val Thr Ala Ala Gly Asp Leu Tyr 3795 3800 3805 Thr Trp Gly Lys Gly Arg Tyr Gly Arg Leu Gly His Ser Asp Ser Glu 3810 . 3815 3820 Asp Gln Leu Lys Pro Lys Leu Val Glu Ala Leu Gln Gly His Arg Val 3825 3830 3835 Val Asp Ile Ala Cys Gly Ser Gly Asp Ala Gln Thr Leu Cys Leu Thr 3845 3850 3855 Asp Asp Asp Thr Val Trp Ser Trp Gly Asp Gly Asp Tyr Gly Lys Leu 3860 3865 3870 Gly Arg Gly Gly Ser Asp Gly Cys Lys Val Pro Met Lys Ile Asp Ser 3875 3880 3885 Leu Thr Gly Leu Gly Val Val Lys Val Glu Cys Gly Ser Gln Phe Ser 3895 3900 Val Ala Leu Thr Lys Ser Gly Ala Val Tyr Thr Trp Gly Lys Gly Asp 3910 3915 Tyr His Arg Leu Gly His Gly Ser Asp Asp His Val Arg Arg Pro Arg 3925 3930 3935 Gln Val Gln Gly Leu Gln Gly Lys Lys Val Ile Ala Ile Ala Thr Gly 3940 3945 Ser Leu His Cys Val Cys Cys Thr Glu Asp Gly Glu Val Tyr Thr Trp 3955 3960 3965 Gly Asp Asn Asp Glu Gly Gln Leu Gly Asp Gly Thr Thr Asn Ala Ile 3970 3975 3980 Gln Arg Pro Arg Leu Val Ala Ala Leu Gln Gly Lys Lys Val Asn Arg 3985 3990 3995 4000 Val Ala Cys Gly Ser Ala His Thr Leu Ala Trp Ser Thr Ser Lys Pro 4005 4010 4015 Ala Ser Ala Gly Lys Leu Pro Ala Gln Val Pro Met Glu Tyr Asn His 4020 4025 4030 Leu Gln Glu Ile Pro Ile Ile Ala Leu Arg Asn Arg Leu Leu Leu 4035 4040 4045 His His Leu Ser Glu Leu Phe Cys Pro Cys Ile Pro Met Phe Asp Leu 4055 4060 Glu Gly Ser Leu Asp Glu Thr Gly Leu Gly Pro Ser Val Gly Phe Asp 4070 4075 Thr Leu Arg Gly Ile Leu Ile Ser Gln Gly Lys Glu Ala Ala Phe Arg 4085 4090 Lys Val Val Gln Ala Thr Met Val Arg Asp Arg Gln His Gly Pro Val 4105

Val Glu Leu Asn Arg Ile Gln Val Lys Arg Ser Arg Ser Lys Gly Gly 4120 4125 Leu Ala Gly Pro Asp Gly Thr Lys Ser Val Phe Gly Gln Met Cys Ala 4135 4140 Lys Met Ser Ser Phe Gly Pro Asp Ser Leu Leu Pro His Arg Val 4145 4150 4155 Trp Lys Val Lys Phe Val Gly Glu Ser Val Asp Asp Cys Gly Gly Gly 4165 4170 4175 Tyr Ser Glu Ser Ile Ala Glu Ile Cys Glu Glu Leu Gln Asn Gly Leu 4180 4185 4190 Thr Pro Leu Leu Ile Val Thr Pro Asn Gly Arg Asp Glu Ser Gly Ala 4195 4200 4205 Asn Arg Asp Cys Tyr Leu Leu Ser Pro Ala Ala Arg Ala Pro Val His 4210 4215 4220 Ser Ser Met Phe Arg Phe Leu Gly Val Leu Leu Gly Ile Ala Ile Arg 4225 4230 4235 Thr Gly Ser Pro Leu Ser Leu Asn Pro Cys Arg Ala Leu Ser Gly Ser 4245 4250 4255 Ser Trp Leu Gly * 4260

<210> 1356 <211> 64 <212> PRT

<213> Homo sapiens

<400> 1356

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Met Ser Lys Val Lys Pro Leu His Gly Ala Pro Ala Pro Leu Leu Val 1 5 10 . 15 Ser Leu Cys Leu Leu Ser Trp Cys Gly Leu Pro Gly Val Ile Val His 25 20 Val Thr Tyr Val Ser Pro Arg His Leu Ser Asn Thr Arg Ser Gly Leu 40 Glu Ser Ile His Gly Cys Asp Pro Met His Gly Ser Pro Val Gly * 55

<210> 1357 <211> 111 <212> PRT <213> Homo sapiens <221> misc feature <222> (1)...(111) <223> Xaa = any amino acid or nothing

Met Ile Phe Asn Lys Ala Ala Asp Thr Leu Gly Asp Val Trp Ile Leu 5 10 Leu Ala Thr Leu Lys Val Leu Ser Leu Leu Trp Leu Leu Tyr Tyr Val 25 Ala Ser Thr Thr Arg Gln Pro His Ala Val Leu Tyr Gln Asp Pro His 40 Ala Gly Pro Leu Trp Val Arg Ser Ser Leu Val Leu Phe Gly Ser Cys

<210> 1358 <211> 47 <212> PRT <213> Homo sapiens

<400> 1358

Met Ala Leu Leu Ile Ser Thr Cys Ile Asn Lys Ala Val Leu Arg Phe 1 5 10 15

Thr Leu Ser Ser Met Asn Asn Lys Ile Ile Leu Ser Trp Tyr Ser Phe 20 25 30

Asn Val Ile Leu Ile Phe His Glu Asn Val Val Tyr Tyr Ile * 35 46

<210> 1359 <211> 73 <212> PRT <213> Homo sapiens

<210> 1360 <211> 57 <212> PRT <213> Homo sapiens

Phe Phe Phe Ala Phe Phe Arg Thr * 50 55 56

<210> 1361 <211> 77 <212> PRT

<213> Homo sapiens

<210> 1362 <211> 106 <212> PRT <213> Homo sapiens

<400> 1362 Met Gln Asn Arg Thr Gly Leu Ile Leu Cys Ala Leu Ala Leu Leu Met 5 10 Gly Phe Leu Met Val Cys Leu Gly Ala Phe Phe Ile Ser Trp Gly Ser 25 30 Ile Phe Asp Cys Gln Gly Ser Leu Ile Ala Ala Tyr Leu Leu Leu Pro 45 35 40 Leu Gly Phe Val Ile Leu Leu Ser Gly Ile Phe Trp Ser Asn Tyr Arg 55 Gln Val Thr Glu Ser Lys Gly Val Leu Arg His Met Leu Arg Gln His 70 75 Leu Ala His Gly Ala Leu Pro Val Ala Thr Val Asp Arg Ala Ala Leu 85 90 Leu Lys Ile Met Cys Lys Gln Leu Leu * 100

<210> 1363 <211> 57 <212> PRT <213> Homo sapiens

20 25 30

Gln Glu Gly Phe His Ser Lys Ser Cys His Cys Leu Gly Asp Ser Phe
35 40 45

Arg Glu Lys Asn Gln Val Val Gly *
50 55 56

<210> 1364 <211> 75 <212> PRT <213> Homo sapiens

<400> 1364

<210> 1365 <211> 58 <212> PRT <213> Homo sapiens

<210> 1366 <211> 58 <212> PRT <213> Homo sapiens

Leu Asp Leu Tyr Ser Ser Leu Phe Phe * 50 55 57

<210> 1367 <211> 48 <212> PRT <213> Homo sapiens

<400> 1367

 Met
 Met
 Gly
 Arg
 Ile
 Phe
 Ala
 Ala
 Leu
 Ser
 Leu
 Ile
 Leu
 Met
 Met
 Met

 1
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 10
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 15
 15

 Tyr
 Ser
 Leu
 Phe
 Pro
 Val
 Pro
 Ser
 Ser
 Leu
 Cys
 His
 Leu
 Glu
 Val

 Trp
 Ala
 Trp
 Arg
 His
 Ile
 Trp
 Pro
 Thr
 Ala
 Gly
 Arg
 Gly
 Val
 Pro
 *

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 45
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<210> 1368 <211> 96 <212> PRT <213> Homo sapiens

<400> 1368

 Met Gly Arg
 Arg Lys
 Ser Phe Phe Phe Phe Phe Leu Phe Leu Glu Cys Arg Gln

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 12
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 Lys
 Gly Leu His Ile Pro Leu Cys Thr Cys Ser His Ala Pro 30
 20
 25
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<210> 1369 <211> 76 <212> PRT <213> Homo sapiens

<400> 1369

65 70 75

<210> 1370 <211> 79 <212> PRT

<213> Homo sapiens

<400> 1370

 Met
 Cys
 Ser
 Cys
 Leu
 His
 Thr
 Leu
 Gln
 Arg
 Arg
 Phe
 Leu
 His
 Phe
 Val

 Ser
 Ile
 Ala
 Leu
 Ser
 Lys
 Ile
 Trp
 Gln
 Asn
 Asn
 Ala
 Phe
 His
 Leu
 Gln

 Val
 Ile
 Ser
 Trp
 Leu
 Ser
 Thr
 Phe
 Val
 Asp
 Lys
 Val
 Ile
 Val
 Met

 Arg
 Leu
 Ile
 Ser
 Lys
 His
 Phe
 Thr
 Asp
 Thr
 Met
 Asp
 Thr
 Na
 Asp
 Thr
 Na
 Thr
 Met
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 Thr
 Na
 Thr
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 Asp
 Thr
 Na
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 Asp
 Na
 Na

<210> 1371

<211> 227

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(227)

<223> Xaa = any amino acid or nothing

<400> 1371

Met Leu Tyr Phe Gln Leu Val Ile Met Ala Gly Thr Val Leu Leu Ala 5 10 Tyr Tyr Phe Glu Cys Thr Asp Thr Phe Gln Val His Ile Gln Gly Phe 20 25 Phe Cys Gln Asp Gly Asp Leu Met Lys Pro Tyr Pro Gly Thr Glu Glu 40 Glu Ser Phe Ile Thr Pro Leu Val Leu Tyr Cys Val Leu Ala Ala Thr 55 60 Pro Thr Ala Ile Ile Phe Ile Gly Glu Ile Ser Met Tyr Phe Ile Lys 70 75 Ser Thr Arg Glu Ser Leu Ile Ala Gln Glu Lys Thr Ile Leu Thr Gly 90 . 85 Glu Cys Cys Tyr Leu Asn Pro Leu Leu Arg Arg Ile Ile Arg Phe Thr 100 105 Gly Val Phe Ala Phe Gly Leu Phe Ala Thr Asp Ile Phe Val Asn Ala 120 125 Gly Gln Val Val Thr Gly His Leu Thr Pro Tyr Phe Leu Thr Val Cys 135 140 Lys Pro Asn Tyr Thr Ser Ala Asp Cys Gln Ala His His Gln Phe Ile 150 155 Asn Asn Gly Asn Ile Cys Thr Gly Asp Leu Gly Ser Asp Arg Lys Gly 165 170 Ser Glu Ile Leu Ser Leu Gln Thr Arg Cys Ser Glu His Leu Leu Arg 185

<210> 1372 <211> 99 <212> PRT <213> Homo sapiens

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<210> 1373 <211> 69 <212> PRT <213> Homo sapiens

<400> 1373 Met Leu His Thr Pro Gln Thr Cys Arg Pro Gly Leu Cys Val Leu Ala 1 5 10 Ser Arg Pro Val Leu Tyr Thr Leu Cys Leu Leu Ile Pro Val Leu Cys 20 25 30 Gly Asp Thr Phe Trp Ala Ser Trp Ser Leu Leu Thr Lys Ala Thr Pro 40 45 Ser Ser Leu Leu Cys Leu Ser Asp Lys Ser Ile Pro Ser Leu Ile Ser 50 55 Lys Gly Asp Ser 65 68

<210> 1374 <211> 296 <212> PRT <213> Homo sapiens

<400> 1374 Met Arg Ser Lys Ile Met Ile His Ile His Ile Phe Leu Leu Ala Ser 10 Phe Arg Phe Lys Glu His Val Gln Asn Asn Leu Pro Arg Asp Leu Leu 20 25 Thr Gly Glu Gln Phe Ile Gln Leu Arg Arg Glu Leu Ala Ser Val Asn 40 Gly His Ser Gly Asp Asp Gly Pro Pro Gly Asp Asp Leu Pro Ser Gly 55 60 Ile Glu Asp Ile Thr Asp Pro Ala Lys Leu Ile Thr Glu Ile Glu Asn 70 75 Met Arg His Arg Ile Ile Glu Ile His Gln Glu Met Phe Asn Tyr Asn 85 90 Glu His Glu Val Ser Lys Arg Trp Thr Phe Glu Glu Gly Ile Lys Arg 105 Pro Tyr Phe His Val Lys Pro Leu Glu Lys Ala Gln Leu Lys Asn Trp 120 Lys Glu Tyr Leu Glu Phe Glu Ile Glu Asn Gly Thr His Glu Arg Val 135 140 Val Val Leu Phe Glu Arg Cys Val Ile Ser Cys Ala Leu Tyr Glu Glu 150 155 Phe Trp Ile Lys Tyr Ala Lys Tyr Met Glu Asn His Ser Ile Glu Gly 165 170 Val Arg His Val Phe Ser Arg Ala Cys Thr Ile His Leu Pro Lys Lys 180 185 Pro Met Val His Met Leu Trp Ala Ala Phe Glu Glu Gln Gln Gly Asn 200 205 Ile/Asn Glu Ala Arg Asn Ile Leu Lys Thr Phe Glu Glu Cys Val Leu 215 220 Gly Leu Ala Met Val Arg Leu Arg Arg Val Ser Leu Glu Arg Arg His 230 235 Gly Asn Leu Glu Glu Ala Glu His Leu Leu Gln Asp Ala Ile Lys Asn 245 250 Ala Lys Ser Asn Asn Glu Ser Ser Phe Tyr Ala Val Lys Leu Ala Arg 260 265 His Leu Phe Lys Ile Gln Lys Asn Leu Pro Lys Ser Arg Lys Val Leu 280 Leu Glu Ala Ile Glu Arg Asp Lys 290 295 296

<210> 1375 <211> 75 <212> PRT <213> Homo sapiens

65 70 74

<210> 1376 <211> 61 <212> PRT <213> Homo sapiens

<210> 1377 <211> 110 <212> PRT <213> Homo sapiens

<400> 1377 Met Trp Val Trp Val Thr Ala Ala His Leu Leu Cys Ser Leu Ala Ala 5 10 Ser Phe Val Lys Lys Lys Ser Leu Gly Lys Leu Arg Val Asp Val Cys 20 25 Arg Ser Pro Pro Pro Glu Gly Ser Arg Thr Gln Thr Ser Ser Leu 35 40 45 Phe Tyr Arg Gly Gly Asn Gly Ala Ser Tyr Ala Asn Tyr Ile Leu His 55 His Thr Met Ala Leu Glu Gly Gln Arg Ser His Trp Ala Pro Cys Val 70 Ser Cys Pro Ala Gln Gly Leu Ala Leu Arg Arg Gly Cys Thr Thr Phe 90 85 Leu His Lys Asn Lys Gly Gly Thr Glu Ala Val Thr Val * 105

<210> 1378 <211> 47 <212> PRT <213> Homo sapiens

<210> 1379 <211> 140 <212> PRT <213> Homo sapiens

<400> 1379 Met Arg His Pro Ser Pro Trp Pro Phe Leu Phe Phe Cys Phe Val Pro 1 5 10 Ala Thr Leu Arg Ser Phe Pro Ser Gly Leu Val Trp Pro Gly Cys Trp 20 25 Trp Glu Pro Arg Ala Ser Pro Ser Ser Leu Ala Pro Gly Met Lys Ser 40 Gln Leu Trp Ala Ala Ala Trp Arg Pro Gly Thr Ser Leu Gln Gly Met 55 Ala Gly Ile Leu Arg Gln Ala Ala Glu Ala Gly Pro Ala Gly Val Ala 70 75 Leu Ile Leu Ile Lys Gly Thr Gly Asn Glu Glu Pro Leu Gly Pro Leu 85 90 Pro Ser Arg Cys Leu Cys Pro Pro Pro Glu Glu Pro Arg Phe His Trp 105 Ala Leu Gly Lys Glu Pro Thr Gly Pro Gly Arg Pro Gln Pro Val Gln 115 120 His His Ile Glu Gly Pro His Pro Val Gly Phe Gly 135

<210> 1380 <211> 50 <212> PRT <213> Homo sapiens

<210> 1381 <211> 78 <212> PRT <213> Homo sapiens

Val Gly Gly Val Phe Ala Leu Val Thr Ala Val Cys Cys Leu Ala
35 40 45

Asp Gly Ala Leu Ile Tyr Arg Lys Leu Leu Phe Asn Pro Ser Gly Pro
50 55 60

Tyr Gln Lys Lys Pro Val His Glu Lys Lys Glu Val Leu *
65 70 75 77

<210> 1382 <211> 57 <212> PRT <213> Homo sapiens

<210> 1383 <211> 64 <212> PRT <213> Homo sapiens

<210> 1384 <211> 67 <212> PRT <213> Homo sapiens

50 55 60 Pro His * 65 66

<210> 1385 <211> 50 <212> PRT

<213> Homo sapiens

<210> 1386 <211> 123 <212> PRT <213> Homo sapiens

<400> 1386 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala 5 10 Tyr Ser Arg Gly Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val 25 30 Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu 40 Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn 55 60 Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu 70 75 Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro 85 90 Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val 100 105 Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe 120

<210> 1387 <211> 65 <212> PRT <213> Homo sapiens

<210> 1388 <211> 56 <212> PRT <213> Homo sapiens

<210> 1389 <211> 76 <212> PRT <213> Homo sapiens

<210> 1390 <211> 149 <212> PRT <213> Homo sapiens

Lys Leu Lys Leu Met Leu Gln Lys Arg Glu Ala Pro Val Pro Thr Lys 35 40 Thr Lys Val Ala Val Asp Glu Asn Lys Ala Lys Glu Phe Leu Gly Ser 55 Leu Lys Arg Gln Lys Arg Gln Leu Trp Asp Arg Thr Arg Pro Glu Val 70 75 80 Gln Gln Trp Tyr Gln Gln Phe Leu Tyr Met Gly Phe Asp Glu Ala Lys 85 90 95 Phe Glu Asp Asp Ile Thr Tyr Trp Leu Asn Arg Asp Arg Asn Gly His 105 Glu Tyr Tyr Gly Asp Tyr Tyr Gln Arg His Tyr Asp Glu Asp Ser Ala 115 120 Ile Gly Pro Arg Ser Pro Tyr Gly Phe Arg His Gly Ala Ser Val Asn 135 Tyr Asp Asp Tyr * 145 148

<210> 1391 <211> 125 <212> PRT <213> Homo sapiens

the second supreme

<400> 1391 Met Val Met Gly Trp His Trp Pro Gln Gly Leu Gly Leu Ser Leu Ser Leu Cys Pro Ser Asp Leu Asp Gly Trp Val Ser Arg Glu Val Pro Leu 20 25 Leu Asp Arg Pro Glm Ala Leu Pro Pro Cys Val Glm Ile Leu Ser Ala 35 40 Pro Ala Ser Thr Ser Cys Pro Ser Ala Leu Ser Pro Trp His Asp Pro 55 60 Gly Leu Pro Val Thr Ser Gln Asn His Phe Ala Trp Phe Pro Leu Gly 70 75 Ser Lys Ala Cys Leu Gly Pro Ser Ile Asp Arg Glu Ala Val Lys Glu 90 85 Ile Asn Ala Glu Glu Gly Val Arg Arg Gln Thr Gln Gly Pro Ile Lys 105 Val Arg Lys Gln Ala Gly Cys Gly Gly Ser Cys Leu *

<210> 1392 <211> 56 <212> PRT <213> Homo sapiens

Ile Ile Leu Pro Leu His Pro 55 55

<210> 1393 <211> 55 <212> PRT <213> Homo sapiens

<400> 1393

<210> 1394 <211> 51 <212> PRT <213> Homo sapiens

<210> 1395 <211> 105 <212> PRT <213> Homo sapiens

85 90 95
Phe Gly Leu Leu Ser Leu Pro Ser Ile
100 105

<210> 1396 <211> 49 <212> PRT <213> Homo sapiens

<210> 1397 <211> 104 <212> PRT <213> Homo sapiens

<213> HOMO Saptems

<400> 1397 Met Leu Ser Trp Val Phe Pro Gly Ser Val Phe Gly Leu Cys Leu Ser 5 10 Val Trp Val Phe Trp His Gln Ala Ser Leu Gly Arg Ala Ser Gly Cys 25 Ala Pro Ala Leu Arg Val Gly Leu Ile Pro Gly Cys Arg Gly Leu Arg 40 Ala Glu Leu Phe His Leu Glu Asp Lys Asp Gly Ser Ser Gly Leu Gly 60 55 Gly Gly Gly Ala Gly His Asp Leu Ile Leu Arg Arg Ala Trp Cys 70 75 Trp Gly Leu Thr Asp Asp Gly Glu Ala Arg Val Gln Ala Leu Gly Met 85 Thr Pro Gly Ile Ala Phe Ser * 100

<210> 1398 <211> 82 <212> PRT <213> Homo sapiens

<210> 1399 <211> 68 <212> PRT <213> Homo sapiens

<210> 1400 <211> 54 <212> PRT <213> Homo sapiens

<210> 1401 <211> 232 <212> PRT <213> Homo sapiens

20 25 Val Ile Arg Ala Leu Arg Leu Trp Arg Thr Ala Lys Leu Gln Val Thr 35 40 Leu Lys Lys Tyr Ser Val His Leu Glu Asp Met Ala Thr Asn Ser Arg 55 Ala Phe Thr Asn Leu Val Arg Lys Ala Leu Arg Leu Ile Gln Glu Thr 75 80 70 Glu Val Ile Ser Arg Gly Phe Thr Leu Leu Leu Asp Arg Val Ser Ala 90 Ala Cys Pro Phe Asn Lys Ala Gly Gln His Pro Ser Gln His Leu Ile 105 110 Gly Leu Arg Lys Ala Val Tyr Arg Thr Leu Arg Ala Ser Phe Gln Ala 115 120 125 Ala Arg Leu Ala Thr Leu Tyr Met Leu Lys Asn Tyr Pro Leu Asn Ser 130 135 140 Glu Ser Asp Asn Val Thr Asn Tyr Ile Cys Val Val Pro Phe Lys Glu 150 155 Leu Gly Leu Gly Leu Ser Glu Glu Gln Ile Ser Glu Glu Glu Ala His 165 170 175 Lys Leu Tyr Arg Trp Leu Gln Pro Ala Cys Ile Glu Gly Phe Val Pro 180 185 190 Thr Leu Gly Gly Thr Glu Phe Arg Val Leu Gln Thr Val Ser Pro Ile 205 195 200 Thr Phe Tyr Ser Gln Phe Thr Ser Trp Ala Leu Thr Tyr Ser Ser Thr 210 215 220 Ser Ala Ser Ser Tyr Leu Ile * 230 231

<210> 1402 <211> 48 <212> PRT <213> Homo sapiens

<210> 1403 <211> 53 <212> PRT <213> Homo sapiens

Tyr Cys Pro His
50 52

<210> 1404 <211> 90 <212> PRT <213> Homo sapiens

<210> 1405 <211> 477 <212> PRT <213> Homo sapiens

<400> 1405 Met Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu Ala Ala Cys Gly Trp Leu Leu Gly Ala Glu Ala Gln Glu Pro Gly Ala 25 Pro Ala Ala Gly Met Arg Arg Arg Arg Leu Gln Gln Glu Asp Gly 40 Ile Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val 55 Ser Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly 70 75 Arg Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn 85 90 Pro Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn 105 Met His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala 120 Gln Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn 135 140 Leu Ile His Ser Thr Arg Ile His Ile Met Pro Ser Leu Asn Pro Asp 150 155 160 Gly Phe Glu Lys Ala Ala Ser Gln Pro Gly Glu Leu Lys Asp Trp Phe 170 175 Val Gly Arg Ser Asn Ala Gln Gly Ile Asp Leu Asn Arg Asn Phe Pro 185 Asp Leu Asp Arg Ile Val Tyr Val Asn Glu Lys Glu Gly Gly Pro Asn

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200 .
                                  205
     195
Asn His Leu Leu Lys Asn Met Lys Lys Ile Val Asp Gln Asn Thr Lys
                               220
  210 215
Leu Ala Pro Glu Thr Lys Ala Val Ile His Trp Ile Met Asp Ile Pro
     230 235
Phe Val Leu Ser Ala Asn Leu His Gly Gly Asp Leu Val Ala Asn Tyr
           245 250 255
Pro Tyr Asp Glu Thr Arg Ser Gly Ser Ala His Glu Tyr Ser Ser Ser
      260 265 270
Pro Asp Asp Ala Ile Phe Gln Ser Leu Ala Arg Ala Tyr Ser Ser Phe
    275 280 285
Asn Pro Ala Met Ser Asp Pro Asn Arg Pro Pro Cys Arg Lys Asn Asp
290 295 300
Asp Asp Ser Ser Phe Val Asp Gly Thr Thr Asn Gly Gly Ala Trp Tyr
                  315
305 310
Ser Val Pro Gly Gly Met Gln Asp Phe Asn Tyr Leu Ser Ser Asn Cys
        325 330 335
Phe Glu Ile Thr Val Glu Leu Ser Cys Glu Lys Phe Pro Pro Glu Glu
       340 345
Thr Leu Lys Thr Tyr Trp Glu Asp Asn Lys Asn Ser Leu Ile Ser Tyr
            360
Leu Glu Gln Ile His Arg Gly Val Lys Gly Phe Val Arg Asp Leu Gln
                375
                             380
Gly Asn Pro Ile Ala Asn Ala Thr Ile Ser Val Glu Gly Ile Asp His
             390 395
Asp Val Thr Ser Ala Lys Asp Gly Asp Tyr Trp Arg Leu Leu Ile Pro
                         410 415
         405
Gly Asn Tyr Lys Leu Thr Ala Ser Ala Pro Gly Tyr Leu Ala Ile Thr
       420
                      425
Lys Lys Val Ala Val Pro Tyr Ser Pro Ala Ala Gly Val Asp Phe Glu
    435 440 445
Leu Glu Ser Phe Ser Glu Arg Lys Glu Glu Glu Lys Glu Glu Leu Met
450 455
                      460
Glu Trp Trp Lys Met Met Ser Glu Thr Leu Asn Phe
             470
                            475 476
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<210> 1406 <211> 55 <212> PRT <213> Homo sapiens

<210> 1407 <211> 66 <212> PRT

<213> Homo sapiens

<210> 1408 <211> 58 <212> PRT <213> Homo sapiens

<210> 1409 <211> 72 <212> PRT <213> Homo sapiens

<210> 1410 <211> 53 <212> PRT <213> Homo sapiens

<210> 1411 <211> 82 <212> PRT <213> Homo sapiens

<210> 1412 <211> 72 <212> PRT <213> Homo sapiens

<210> 1413 <211> 59 <212> PRT

<213> Homo sapiens

<210> 1414 <211> 78 <212> PRT <213> Homo sapiens

<210> 1415 <211> 171 <212> PRT <213> Homo sapiens

<400> 1415 Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser Ala Leu 1 5 10 Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln Gln Phe 25 Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val Lys Lys 40 Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu Leu Val 55 Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val Arg Asn 75 70 Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp Leu Tyr 85 Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val Leu Ile 100 105 Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala Leu Met 115 . 120 125 Met Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly Leu Asn

<210> 1416 <211> 77 <212> PRT <213> Homo sapiens

<210> 1417 <211> 249 <212> PRT <213> Homo sapiens

<400> 1417 Met Glu Lys Ile Pro Glu Ile Gly Lys Phe Gly Glu Lys Ala Pro Pro 10 Ala Pro Ser His Val Trp Arg Pro Ala Ala Leu Phe Leu Thr Leu Leu 25 Cys Leu Leu Leu Ile Gly Leu Gly Val Leu Ala Ser Met Phe His 40 Val Thr Leu Lys Ile Glu Met Lys Lys Met Asn Lys Leu Gln Asn Ile Ser Glu Glu Leu Gln Arg Asn Ile Ser Leu Gln Leu Met Ser Asn Met 70 75 Asn Ile Ser Asn Lys Ile Arg Asn Leu Ser Thr Thr Leu Gln Thr Ile 85 90 Ala Thr Lys Leu Cys Arg Glu Leu Tyr Ser Lys Glu Gln Glu His Lys 105 Cys Lys Pro Cys Pro Arg Arg Trp Ile Trp His Lys Asp Ser Cys Tyr 120 Phe Leu Ser Asp Asp Val Gln Thr Trp Gln Glu Ser Lys Met Ala Cys 135 Ala Ala Gln Asn Ala Ser Leu Leu Lys Ile Asn Asn Lys Asn Ala Leu 150 155 160 Glu Phe Ile Lys Ser Gln Ser Arg Ser Tyr Asp Tyr Trp Leu Gly Leu 165 170 Ser Pro Glu Glu Asp Ser Thr Arg Gly Met Arg Val Asp Asn Ile Ile 185

<210> 1418 <211> 65 <212> PRT <213> Homo sapiens

<210> 1419 <211> 468 <212> PRT <213> Homo sapiens

<400> 1419 Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val 1 5 10 Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser 20 25 Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe 40 45 Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr Trp Phe Arg Ala Gly Asn Asp Ile Ser Trp Lys Ala Pro Val Ala Thr 70 75 65 Asn Asn Pro Ala Trp Ala Val Glu Glu Glu Thr Arg Asp Arg Phe His 90 85 Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp 105 Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly 120 125 Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr 135 140 Ala Leu Thr His Arg Pro Asn Ile Leu Ile Pro Gly Thr Leu Glu Ser 145. 150 155 Gly Cys Phe Gln Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln

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. 165
                            170
Gly Thr Pro Pro Met Ile Ser Trp Met Gly Thr Ser Val Ser Pro Leu
             185
His Pro Ser Thr Thr Arg Ser Ser Val Leu Thr Leu Ile Pro Gln Pro
                             205
                      200
Gln His His Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala
                                   220
                215
Gly Val Thr Thr Asn Arg Thr Ile Gln Leu Asn Val Ser Tyr Pro Pro
225 230 235 . 240
Gln Asn Leu Thr Val Thr Val Phe Gln Gly Glu Gly Thr Ala Ser Thr
          245 250 255
Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly Gln Ser Leu
         260 265
Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp
                    280
                          285
Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser Asn Pro Leu
         295
                       300
Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu Phe Thr Cys
                               315
   . 310
Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu Asn Leu Ser
           325
                            330
Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser Gly Val Leu
                        345
                                350
Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Ser
                             365
     355
                     360
Phe Cys Val Ile Phe Ile Val Val Arg Ser Cys Arg Lys Lys Ser Ala
                375
Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr
                              395
              390
Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp
           405 410 . 415
Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu
        420 425 430
Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly Glu Pro Gln
435 440
                                   445
Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser Glu Ile Lys
                                   460
Ile Pro Lys · *
465 467
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<210> 1420 <211> 150 <212> PRT <213> Homo sapiens

<210> 1421 <211> 89 <212> PRT <213> Homo sapiens

<400> 1421 Met Tyr Val Phe Leu Leu Cys Pro Ala Cys Gly Arg Leu Met Gly Ser 5 10 Thr Tyr Met Arg Leu Leu Pro Gln Ser Glu Pro Ala Leu His Asn Arg 20 25 Ile Leu Arg Gln Thr Glu Pro Leu Leu Tyr Phe Lys Arg Gly Lys Gln 40 Gln Gly Leu Phe Tyr Ala Ser Phe Pro Ala Val His Arg Met Asp Ser 60 50 55 Leu Leu Arg Arg Thr Val Val Ile Leu Tyr Lys Arg Thr Asn Thr Val 75 70 Gly Val Ser Leu Phe Gln Asn Ala * 85

<210> 1422
<211> 83
<212> PRT
<213> Homo sapiens

<400> 1422 Met Met Thr Trp Ala Ser Leu Ala Leu Gly Leu Thr Arg Ala Leu Gly 1 5 10 Gly Met Gly Ser Phe Leu Leu Arg Ile Leu Gly Trp Ser Trp Ala Met 20 25 · Gly Ser Arg Ser Arg Ala Arg Trp Pro Arg Gly Arg Leu Gly Phe Thr 40 Ser Met Leu Ser Cys Met Arg Gln Cys Ser Val Cys Arg Met Ile Met 55 60 Ser Leu Val Glu Val Leu Val Ala Thr Ser Gln Val Val Lys Leu Trp 70 75 Ser Arg * 82

<210> 1423 <211> 54

<212> PRT <213> Homo sapiens

<210> 1424 <211> 73 <212> PRT <213> Homo sapiens

<210> 1425 <211> 245 <212> PRT <213> Homo sapiens

<400> 1425 Met Ala Cys Tyr Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu 10 Ile Ala Val Phe Asn Asn Thr Phe Phe Glu Val Lys Ser Ile Ser Asn 20 25 Gln Val Trp Lys Phe Gln Arg Tyr Gln Leu Ile Met Thr Phe His Glu 45 35 40 Arg Pro Val Leu Pro Pro Pro Leu Ile Ile Phe Ser His Met Thr Met 55 Ile Phe Gln His Leu Cys Cys Arg Trp Arg Lys His Glu Ser Asp Pro . 70 Asp Glu Arg Asp Tyr Gly Leu Lys Leu Phe Ile Thr Asp Asp Glu Leu 85 90 Lys Lys Val His Asp Phe Glu Glu Glu Cys Ile Glu Glu Tyr Phe Arg 105 Glu Lys Asp Asp Arg Phe Asn Ser Ser Asn Asp Glu Arg Ile Arg Val

Thr Ser Glu Arg Val Glu Asn Met Ser Met Arg Leu Glu Glu Val Asn 135 Glu Arg Glu His Ser Met Lys Ala Ser Leu Gln Thr Val Asp Ile Arg 150 155 Leu Ala Gln Leu Glu Asp Leu Ile Gly Arg Met Ala Thr Ala Leu Glu 170 165 Arg Leu Thr Gly Leu Glu Arg Ala Glu Ser Asn Lys Ile Arg Ser Arg 185 Thr Ser Ser Asp Cys Thr Asp Ala Arg Leu His Trp Pro Val Arg Ala 200 ·Ala Leu Thr Ser Gln Glu Arg Glu His Leu Ser Ala Pro Lys Arg Gly 210 215 220 Leu Glu Pro Trp Gln Asn Ile Leu Phe Ile Gln Tyr Lys Pro Ala Ala 230 235 Ser Ser Ser Thr * 244

<210> 1426

<211> 520

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(520)

<223> Xaa = any amino acid or nothing

<400> 1426

Met Asp Ile Leu Leu Leu Leu Phe Phe Met Ile Ile Phe Ala Ile 5 10 · 15 Leu Gly Phe Tyr Leu Phe Ser Pro Asn Pro Ser Asp Pro Tyr Phe Ser 25 20 Thr Leu Glu Asn Ser Ile Val Ser Leu Phe Val Leu Leu Thr Thr Ala 40 Asn Phe Pro Asp Val Met Met Pro Ser Tyr Ser Arg Asn Pro Trp Ser 55 Cys Val Phe Phe Ile Val Tyr Leu Ser Ile Glu Leu Tyr Phe Ile Met 70 75 Asn Leu Leu Ala Val Val Phe Asp Thr Phe Asn Asp Ile Glu Lys 85 90 Arg Lys Phe Lys Ser Leu Leu Leu His Lys Arg Thr Ala Ile Gln His 100 105 Ala Tyr Arg Leu Leu Ile Ser Gln Arg Arg Pro Ala Gly Ile Ser Tyr 120 125 Arg Gln Phe Glu Gly Leu Met Arg Phe Tyr Lys Pro Arg Met Ser Ala 135 Arg Glu Arg Tyr Leu Thr Phe Lys Ala Leu Asn Gln Asn Asn Thr Pro 150 155 Leu Leu Ser Leu Lys Asp Phe Tyr Asp Ile Tyr Glu Val Ala Ala Leu 165 170 Lys Trp Lys Ala Thr Lys Asn Arg Glu His Trp Val Asp Glu Leu Pro 185 Arg Thr Ala Leu Leu Ile Phe Lys Gly Ile Asn Ile Leu Val Lys Ala 200 Lys Ala Phe Gln Tyr Phe Met Tyr Leu Val Val Ala Val Asn Gly Val 215 . 220 Trp Ile Leu Val Glu Thr Phe Met Leu Lys Gly Gly Asn Phe Phe Ser

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230
                               235
225
Lys His Val Pro Trp Ser Tyr Leu Val Phe Leu Thr Ile Tyr Gly Val
         245 250 255
Glu Leu Phe Leu Lys Val Ala Gly Leu Gly Pro Val Glu Tyr Leu Ser
                         265
Ser Gly Trp Asn Leu Phe Asp Phe Ser Val Thr Val Phe Ala Phe Leu
     275 280
Gly Leu Leu Ala Leu Ala Leu Asn Met Glu Pro Phe Tyr Phe Ile Val
       295
Val Leu Arg Pro Leu Gln Leu Leu Arg Leu Phe Lys Leu Lys Glu Arg
305 - 310
                               315 320
Tyr Arg Asn Val Leu Asp Thr Met Phe Glu Leu Leu Pro Arg Met Ala
                            330
            325
Ser Leu Gly Leu Thr Leu Leu Ile Phe Tyr Tyr Ser Phe Ala Ile Val
                         345
Gly Met Glu Phe Phe Cys Gly Ile Val Phe Pro Asn Cys Cys Asn Thr
                     360
                          365
Ser Thr Val Ala Asp Ala Tyr Arg Trp Arg Asn His Thr Val Gly Asn
           375
                          380
Arg Thr Val Val Glu Glu Gly Tyr Tyr Tyr Leu Asn Asn Phe Asp Asn
385 390
                               395
Ile Leu Asn Ser Phe Val Thr Leu Phe Glu Leu Thr Val Val Asn Asn
       . 405
                            410
Trp Tyr Ile Ile Met Glu Gly Val Thr Ser Gln Thr Ser His Trp Ser
         420
                         425
Arg Leu Tyr Phe Met Thr Phe Tyr Ile Ala Thr Met Val Val Met Thr
                                    445
    435 440
Ile Ile Val Ala Phe Ile Leu Glu Ala Phe Val Phe Arg Met Asn Tyr
                455
                                  460
Ser Arg Lys Asn Gln Asp Ser Glu Val Asp Gly Gly Ile Thr Leu Glu
              470
                               475
Lys Glu Ile Ser Lys Glu Glu Leu Val Ala Val Leu Glu Leu Tyr Arg
       485 490 495
Glu Ala Arg Xaa Ala Ser Ser Asp Val Thr Arg Leu Leu Glu Thr Leu
      500 505
Ser Gln Met Glu Arg Tyr Gln Gln
     515
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<210> 1427 <211> 106 <212> PRT <213> Homo sapiens

<400> 1427

 Met
 Ser
 Pro
 Gln
 His
 Leu
 Leu
 Leu
 Thr
 Leu
 Thr
 Leu
 Pro
 Pro</th

Thr Thr His Arg Leu Pro Ser Cys Phe * 100 105

<210> 1428 <211> 841 <212> PRT <213> Homo sapiens

<400> 1428 Met Ala Leu Ala Ser Ala Ala Pro Gly Ser Ile Phe Cys Lys Gln Leu 10 Leu Phe Ser Leu Leu Val Leu Thr Leu Leu Cys Asp Ala Cys Gln Lys 25 Val Tyr Leu Arg Val Pro Ser His Leu Gln Ala Glu Thr Leu Val Gly 40 Lys Val Asn Leu Glu Glu Cys Leu Lys Ser Ala Ser Leu Ile Arg Ser 55 Ser Asp Pro Ala Phe Arg Ile Leu Glu Asp Gly Ser Ile Tyr Thr Thr 70 75 His Asp Leu Ile Leu Ser Ser Glu Arg Lys Ser Phe Ser Ile Phe Leu 90 Ser Asp Gly Gln Arg Arg Glu Gln Gln Glu Ile Lys Val Val Leu Ser 105 Ala Arg Glu Asn Lys Ser Pro Lys Lys Arg His Thr Lys Asp Thr Ala 120 125 Leu Lys Arg Ser Lys Arg Arg Trp Ala Pro Ile Pro Ala Ser Leu Met 135 140 Glu Asn Ser Leu Gly Pro Phe Pro Gln His Val Gln Gln Ile Gln Ser 150 155 Asp Ala Ala Gln Asn Tyr Thr Ile Phe Tyr Ser Ile Ser Gly Pro Gly 165 170 Val Asp Lys Glu Pro Phe Asn Leu Phe Tyr Ile Glu Lys Asp Thr Gly 180 185 190 Asp Ile Phe Cys Thr Arg Ser Ile Asp Arg Glu Lys Tyr Glu Gln Phe 205 ' 200 Ala Leu Tyr Gly Tyr Ala Thr Thr Ala Asp Gly Tyr Ala Pro Glu Tyr 215 220 Pro Leu Pro Leu Ile Ile Lys Ile Glu Asp Asp Asn Asp Asn Ala Pro 230 235 Tyr Phe Glu His Arg Val Thr Ile Phe Thr Val Pro Glu Asn Cys Arg 250 245 Ser Gly Thr Ser Val Gly Lys Val Thr Ala Thr Asp Leu Asp Glu Pro 265 270 Asp Thr Leu His Thr Arg Leu Lys Tyr Lys Ile Leu Gln Gln Ile Pro 280 Asp His Pro Lys His Phe Ser Ile His Pro Asp Thr Gly Val Ile Thr 295 Thr Thr Pro Phe Leu Asp Arg Glu Lys Cys Asp Thr Tyr Gln Leu 315 310 Ile Met Glu Val Arg Asp Met Gly Gly Gln Pro Phe Gly Leu Phe Asn 325 330 Thr Gly Thr Ile Thr Ile Ser Leu Glu Asp Glu Asn Asp Asn Pro Pro 345 Ser Phe Thr Glu Thr Ser Tyr Val Thr Glu Val Glu Glu Asn Arg Ile 360 Asp Val Glu Ile Leu Arg Met Lys Val Gln Asp Gln Asp Leu Pro Asn

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375
Thr Pro His Ser Lys Ala Val Tyr Lys Ile Leu Gln Gly Asn Glu Asn
                                      395
                   390
Gly Asn Phe Ile Ile Ser Thr Asp Pro Asn Thr Asn Glu Gly Val Leu
                                  410
               405
Cys Val Val Lys Pro Leu Asn Tyr Glu Val Asn Arg Gln Val Ile Leu
           420
                              425
Gln Val Gly Val Ile Asn Glu Ala Gln Phe Ser Lys Ala Ala Ser Ser
                           440
Gln Thr Pro Thr Met Cys Thr Thr Thr Val Thr Val Lys Ile Ile Asp
                       455
                                 · 460
Ser Asp Glu Gly Pro Glu Cys His Pro Pro Val Lys Val Ile Gln Ser
                                      475
                  470
Gln Asp Gly Phe Pro Ala Gly Gln Glu Leu Leu Gly Tyr Lys Ala Leu
                                  490
              485
Asp Pro Glu Ile Ser Ser Gly Glu Gly Leu Arg Tyr Gln Lys Leu Gly
                               505
Asp Glu Asp Asn Trp Phe Glu Ile Asn Gln His Thr Gly Asp Leu Arg
                           520
Thr Leu Lys Val Leu Asp Arg Glu Ser Lys Phe Val Lys Asn Asn Gln
                                         540
                      535
Tyr Asn Ile Ser Val Val Ala Gly Asp Ala Val Gly Arg Ser Cys Thr
                               555
                   550
Gly Thr Leu Val Val His Leu Asp Asp Tyr Asn Asp His Ala Pro Gln
                                 570
               565
Ile Asp Lys Glu Val Thr Ile Cys Gln Asn Asn Glu Asp Phe Val Val
          580
                              585
Leu Lys Pro Val Asp Pro Asp Gly Pro Glu Asn Gly Pro Pro Phe Gln
                          600
Phe Phe Leu Asp Asn Ser Ala Ser Lys Asn Trp Asn Ile Lys Lys
                      615
Asp Gly Lys Thr Ala Ile Leu Arg Gln Arg Gln Asn Leu Asp Tyr Asn
                                      635
Tyr Tyr Ser Val Pro Ile Gln Ile Lys Asp Arg His Gly Leu Val Ala
                                  650
               645
Thr His Met Leu Thr Val Arg Val Cys Asp Cys Ser Thr Pro Ser Glu
                               665
Cys Thr Met Lys Asp Lys Ser Thr Arg Asp Val Arg Pro Asn Val Ile
                           680
Leu Gly Arg Trp Ala Ile Leu Ala Met Val Leu Gly Ser Val Leu Leu
                      695
                                          700
Leu Cys Ile Leu Phe Thr Cys Phe Cys Val Thr Ala Lys Arg Thr Val
                                      715
                   710
Lys Lys Cys Phe Pro Glu Asp Ile Ala Gln Gln Asn Leu Ile Val Ser
               725
                                  730
Asn Thr Glu Gly Pro Gly Glu Glu Val Thr Glu Ala Asn Ile Arg Leu
                               745
Pro Met Gln Thr Ser Asn Ile Cys Asp Thr Ser Met Ser Val Gly Thr
                           760
Val Gly Gly Gln Gly Ile Lys Thr Gln Gln Ser Phe Glu Met Val Lys
                      775
                                          780
Gly Gly Tyr Thr Leu Asp Ser Asn Lys Gly Gly Gly His Gln Thr Leu
                  790
                                      795
Glu Ser Val Lys Gly Val Gly Gln Gly Asp Thr Gly Arg Tyr Ala Tyr
                                 810
              805
Thr Asp Trp Gln Ser Phe Thr Gln Pro Arg Leu Gly Glu Glu Ser Ile
                              825
Arg Gly His Thr Leu Ile Lys Asn *
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<210> 1429.
<211> 262
<212> PRT
<213> Homo sapiens
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<400> 1429 Met Glu Leu Leu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys 5 10 Ser Ser Asn Ser Thr Gly Val Leu Glu Ala Ala Asn Asn Ser Leu Val 25 20 Val Thr Thr Lys Pro Ser Ile Thr Thr Pro Asn Thr Glu Ser Leu 40 Gln Lys Asn Val Val Thr Pro Thr Thr Gly Thr Thr Pro Lys Gly Thr 55 60 Ile Thr Asn Glu Leu Leu Lys Met Ser Leu Met Ser Thr Ala Thr Phe 75 70 Leu Thr Ser Lys Asp Glu Gly Leu Lys Ala Thr Thr Thr Asp Val Arg 90 85 Lys Asn Asp Ser Ile Ile Ser Asn Val Thr Val Thr Ser Val Thr Leu 105 110 100 Pro Asn Ala Val Ser Thr Leu Gln Ser Ser Lys Pro Lys Thr Glu Thr 120 125 Gln Ser Ser Ile Lys Thr Thr Glu Ile Pro Gly Ser Val Leu Gln Pro 135 140 Asp Ala Ser Pro Ser Lys Thr Gly Thr Leu Thr Ser Ile Pro Val Thr 145 150 155 Ile Pro Glu Asn Thr Ser Gln Ser Gln Val Ile Gly Thr Glu Gly Gly 170 175 165 Lys Asn Ala Ser Thr Ser Ala Thr Ser Arg Ser Tyr Ser Ser Ile Ile 185 180 Leu Pro Val Val Ile Ala Leu Ile Val Ile Thr Leu Ser Val Phe Val 200 Leu Val Gly Leu Tyr Arg Met Cys Trp Lys Ala Asp Pro Gly Thr Pro 220 215 Glu Asn Gly Asn Asp Gln Pro Gln Ser Asp Lys Glu Ser Val Lys Leu 235 230 Leu Thr Val Lys Thr Ile Ser His Glu Ser Gly Glu His Ser Ala Gln 245 Gly Lys Thr Lys Asn * 260 261

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<210> 1430
<211> 66
<212> PRT
<213> Homo sapiens
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35 40 45

Gln Asn Pro Asn Asn Val Leu Ile Phe Leu Gln Lys Trp Lys Asn Arg
50 55 60

Cys *
65

<210> 1431 <211> 437 <212> PRT <213> Homo sapiens

<400> 1431 Met Leu Lys Val Ser Ala Val Leu Cys Val Cys Ala Ala Ala Trp Cys 10 Ser Gln Ser Leu Ala Ala Ala Ala Ala Val Ala Ala Gly Gly Arg Ser Asp Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu Thr Thr Ile 40 Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys Phe Arg Asp Glu 55 Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro Gly Lys Pro Phe Asp 75 70 Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys Leu Lys Met Lys Cys Ser 90 Arg His Lys Val Cys Ile Ala Gln Asp Ser Gln Thr Ala Val Cys Ile 105 Ser His Arg Arg Leu Thr His Arg Met Lys Glu Ala Gly Val Asp His 125 120 Arg Gln Trp Arg Gly Pro Ile Leu Ser Thr Cys Lys Gln Cys Pro Val 135 140 Val Tyr Pro Ser Pro Val Cys Gly Ser Asp Gly His Thr Tyr Ser Phe 155 150 Gln Cys Lys Leu Glu Tyr Gln Ala Cys Val Leu Gly Lys Gln Ile Ser 170 165 Val Lys Cys Glu Gly His Cys Pro Cys Pro Ser Asp Lys Pro Thr Ser 185 190 180 Thr Ser Arg Asn Val Lys Arg Ala Cys Ser Asp Leu Glu Phe Arg Glu 200 205 Val Ala Asn Arg Leu Arg Asp Trp Phe Lys Ala Leu His Glu Ser Gly 215 220 Ser Gln Asn Lys Lys Thr Lys Thr Leu Leu Arg Pro Glu Arg Ser Arg 235 230 Phe Asp Thr Ser Ile Leu Pro Ile Cys Lys Asp Ser Leu Gly Trp Met 245 250 Phe Asn Arg Leu Asp Thr Asn Tyr Asp Leu Leu Asp Gln Ser Glu 260 265 Leu Arg Ser Ile Tyr Leu Asp Lys Asn Glu Gln Cys Thr Lys Ala Phe 280 Phe Asn Ser Cys Asp Thr Tyr Lys Asp Ser Leu Ile Ser Asn Asn Glu 295 300 Trp Cys Tyr Cys Phe Gln Arg Gln Gln Asp Pro Pro Cys Gln Thr Glu 310 315 Leu Ser Asn Ile Gln Lys Arg Gln Gly Val Lys Lys Leu Leu Gly Gln 325 330 Tyr Ile Pro Leu Cys Asp Glu Asp Gly Tyr Tyr Lys Pro Thr Gln Cys 345

His Gly Ser Val Gly Gln Cys Trp Cys Val Asp Arg Tyr Gly Asn Glu 355 360 365 Val Met Gly Ser Arg Ile Asn Gly Val Ala Asp Cys Ala Ile Asp Phe 375 380 Glu Ile Ser Gly Asp Phe Ala Ser Gly Asp Phe His Glu Trp Thr Asp 390 395 Asp Glu Asp Asp Glu Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu 405 410 Asp Asp Asp Glu Asp Glu Gly Asp Asp Asp Asp Gly Gly Asp Asp His 420 425 Asp Val Tyr Ile * 435 436

<210> 1432 <211> 53 <212> PRT <213> Homo sapiens

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<210> 1433 <211> 76 <212> PRT <213> Homo sapiens

<210> 1434 <211> 169 <212> PRT <213> Homo sapiens

<400> 1434 Met Glu Ser Trp Trp Gly Leu Pro Cys Leu Ala Phe Leu Cys Phe Leu 10 5 Met His Ala Arg Gly Gln Arg Asp Phe Asp Leu Ala Asp Ala Leu Asp 25 Asp Pro Glu Pro Thr Lys Lys Pro Asn Ser Asp Ile Tyr Pro Lys Pro 40 Lys Pro Pro Tyr Tyr Pro Gln Pro Glu Asn Pro Asp Ser Gly Gly Asn Ile Tyr Pro Arg Pro Lys Pro Arg Pro Gln Pro Gln Pro Gly Asn Ser 70 75 Gly Asn Ser Gly Gly Ser Tyr Phe Asn Asp Val Asp Arg Asp Asp Gly 90 85 Arg Tyr Pro Pro Arg Pro Arg Pro Arg Pro Pro Ala Gly Gly Gly 100 105 Gly Gly Tyr Ser Ser Tyr Gly Asn Ser Asp Asn Thr His Gly Gly Asp 115 120 125 His His Ser Thr Tyr Gly Asn Pro Glu Gly Asn Met Val Ala Lys Ile 135 140 Val Ser Pro Ile Val Ser Val Val Val Thr Leu Leu Gly Ala Ala 150 155 Ala Gln Leu Phe Gln Thr Lys Gln * 165 168

<210> 1435 <211> 162 <212> PRT

<213> Homo sapiens

<400> 1435 Met Arg Phe Val Thr Leu Ser Ser Ala Cys Leu Cys Pro Cys Pro Leu 5 10 Gly Pro Cys Trp Thr Arg His Pro Ser Tyr Gly Asn Leu His Glu Ala 20 25 30 . Ser Thr Ser Leu Pro Pro Arg His Trp Thr Gly Ala Arg Lys Trp Asn 40 Glu Ser Ser His Cys Leu Lys Ser Trp Arg Pro Ser Ser Ala Ser Gly 55 Ser Pro Glu Asn Leu Gly Ser Asp Arg Arg Thr Glu Thr Glu Gly Arg 70 75 Glu Arg Asp Cys Asp Arg Glu Ala Glu Glu Gly Asp Arg Val Arg Glu 85 90 Glu Gln Asn Ser Leu Gln Trp Glu Gln Arg Gln Lys Cys Gly Gly Pro 105 Thr Gly Arg Gly Gly Arg Glu Gly Glu Gly Arg Arg Glu Gly Gln Leu 120 Pro Val Gln Val Ala Val Arg Ala Leu Gly Leu Gly Arg Gly Thr Leu 135 Leu Leu Ala Ser His Thr Gly Ser Ile Arg Gly Pro Arg Glu Gln 150 155 Val Ser 162

<210> 1436

<211> 77 <212> PRT <213> Homo sapiens

<210> 1437 <211> 85 <212> PRT <213> Homo sapiens

<210> 1438 <211> 76 <212> PRT <213> Homo sapiens

<210> 1439 <211> 425 <212> PRT <213> Homo sapiens

<400> 1439 Met Ser Leu Thr Ile Trp Thr Val Cys Gly Val Leu Ser Leu Phe Gly 10 Ala Leu Ser Tyr Ala Glu Leu Gly Thr Thr Ile Lys Lys Ser Gly Gly 20 25 His Tyr Thr Tyr Ile Leu Glu Val Phe Gly Pro Leu Pro Ala Phe Val 40 Arg Val Trp Val Glu Leu Leu Ile Ile Arg Pro Ala Ala Thr Ala Val 55 Ile Ser Leu Ala Phe Gly Arg Tyr Ile Leu Glu Pro Phe Phe Ile Gln 70 75 Cys Glu Ile Pro Glu Leu Ala Ile Lys Leu Ile Thr Ala Val Gly Ile 85 90 Thr Val Val Met Val Leu Asn Ser Met Ser Val Ser Trp Ser Ala Arg 100 105 Ile Gln Ile Phe Leu Thr Phe Cys Lys Leu Thr Ala Ile Leu Ile Ile 120 Ile Val Pro Gly Val Met Gln Leu Ile Lys Gly Gln Thr Gln Asn Phe 135 140 Lys Asp Ala Phe Ser Gly Arg Asp Ser Ser Ile Thr Arg Leu Pro Leu 150 155 160 Ala Phe Tyr Tyr Gly Met Tyr Ala Tyr Ala Gly Trp Phe Tyr Leu Asn 170 165 Phe Val Thr Glu Glu Val Glu Asn Pro Glu Lys Thr Ile Pro Leu Ala 185 Ile Cys Ile Ser Met Ala Ile Val Thr Ile Gly Tyr Val Leu Thr Asn 205 195 200 Val Ala Tyr Phe Thr Thr Ile Asn Ala Glu Glu Leu Leu Leu Ser Asn 215 220 Ala Val Ala Val Thr Phe Ser Glu Arg Leu Leu Gly Asn Phe Ser Leu 230 235 Ala Val Pro Ile Phe Val Ala Leu Ser Cys Phe Gly Ser Met Asn Gly 250 Gly Val Phe Ala Val Ser Arg Leu Phe Tyr Val Ala Ser Arg Glu Gly 270 265 His Leu Pro Glu Ile Leu Ser Met Ile His Val Arg Lys His Thr Pro 280 285 Leu Pro Ala Val Ile Val Leu His Pro Leu Thr Met Ile Met Leu Phe 295 300 Ser Gly Asp Leu Asp Ser Leu Leu Asn Phe Leu Ser Phe Ala Arg Trp 310 315 Leu Phe Ile Gly Leu Ala Val Ala Gly Leu Ile Tyr Leu Arg Tyr Lys 330 325 335 Cys Pro Asp Met His Arg Pro Phe Lys Val Pro Leu Phe Ile Pro Ala 340 345 Leu Phe Ser Phe Thr Cys Leu Phe Met Val Ala Leu Ser Leu Tyr Ser 360 365 Asp Pro Phe Ser Thr Gly Ile Gly Phe Val Ile Thr Leu Thr Gly Val 375 380 Pro Ala Tyr Tyr Leu Phe Ile Ile Trp Asp Lys Lys Pro Arg Trp Phe 395

Arg Ile Met Ser Glu Lys Ile Thr Arg Thr Leu Gln Ile Ile Leu Glu 405 410 415

Val Val Pro Glu Glu Asp Lys Leu * 424

<210> 1440 <211> 70 <212> PRT <213> Homo sapiens

<210> 1441 <211> 1691 <212> PRT <213> Homo sapiens

<400> 1441 Met Trp Ser Leu His Ile Val Leu Met Arg Cys Ser Phe Arg Leu Thr 10 Lys Ser Leu Ala Thr Gly Pro Trp Ser Leu Ile Leu Ile Leu Phe Ser 25 Val Gln Tyr Val Tyr Gly Ser Gly Lys Lys Tyr Ile Gly Pro Cys Gly 40 Gly Arg Asp Cys Ser Val Cys His Cys Val Pro Glu Lys Gly Ser Arg 55 Gly Pro Pro Gly Pro Gly Pro Gln Gly Pro Ile Gly Pro Leu Gly 70 75 Ala Pro Gly Pro Ile Gly Leu Ser Gly Glu Lys Gly Met Arg Gly Asp 85 90 Arg Gly Pro Pro Gly Ala Ala Gly Asp Lys Gly Asp Lys Gly Pro Thr 105 110 Gly Val Pro Gly Phe Pro Gly Leu Asp Gly Ile Pro Gly His Pro Gly 120 Pro Pro Gly Pro Arg Gly Lys Pro Gly Met Ser Gly His Asn Gly Ser 140 135 Arg Gly Asp Pro Gly Phe Pro Gly Gly Arg Gly Ala Leu Gly Pro Gly 150 155 160 Gly Pro Leu Gly His Pro Gly Glu Lys Gly Glu Lys Gly Asn Ser Val 170 Phe Ile Leu Gly Ala Val Lys Gly Ile Gln Gly Asp Arg Gly Asp Pro 185 Gly Leu Pro Gly Leu Pro Gly Ser Trp Gly Ala Gly Gly Pro Ala Gly

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200
Pro Thr Gly Tyr Pro Gly Glu Pro Gly Leu Val Gly Pro Pro Gly Gln
                       215
                                          220
Pro Gly Arg Pro Gly Leu Lys Gly Asn Pro Gly Val Gly Val Lys Gly
                   230
                                       235
Gln Met Gly Asp Pro Gly Glu Val Gly Gln Gln Gly Ser Pro Gly Pro
               245
                                   250
Thr Leu Leu Val Glu Pro Pro Asp Phe Cys Leu Tyr Lys Gly Glu Lys
          260
                               265
Gly Ile Lys Gly Ile Pro Gly Met Val Gly Leu Pro Gly Pro Pro Gly
                          280
                                             285
Arg Lys Gly Glu Ser Gly Ile Gly Ala Lys Gly Glu Lys Gly Ile Pro
                      295
                                          300
Gly Phe Pro Gly Pro Arg Gly Asp Pro Gly Ser Tyr Gly Ser Pro Gly
                  310
                                     315
Phe Pro Gly Leu Lys Gly Glu Leu Gly Leu Val Gly Asp Pro Gly Leu
            325
                                 330
Phe Gly Leu Ile Gly Pro Lys Gly Asp Pro Gly Asn Arg Gly His Pro
                               345
Gly Pro Pro Gly Val Leu Val Thr Pro Pro Leu Pro Leu Lys Gly Pro
                           360
Pro Gly Asp Pro Gly Phe Pro Gly Arg Tyr Gly Glu Thr Gly Asp Val
   370
                       375
Gly Pro Pro Gly Pro Pro Gly Leu Leu Gly Arg Pro Gly Glu Ala Cys
                   390
                                      395
Ala Gly Met Ile Gly Pro Pro Gly Pro Gln Gly Phe Pro Gly Leu Pro
               405
                                  410
Gly Leu Pro Gly Glu Ala Gly Ile Pro Gly Arg Pro Asp Ser Ala Pro
                              425
Gly Lys Pro Gly Lys Pro Gly Ser Pro Gly Leu Pro Gly Ala Pro Gly
                          440
Leu Gln Gly Leu Pro Gly Ser Ser Val Ile Tyr Cys Ser Val Gly Asn
                       455
                                          460
Pro Gly Pro Gln Gly Ile Lys Gly Lys Val Gly Pro Pro Gly Gly Arg
                   470
                                      475
Gly Pro Lys Gly Glu Lys Gly Asn Glu Gly Leu Cys Ala Cys Glu Pro
                                  490
Gly Pro Met Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly Arg Gln Gly
          500
                              505
Ser Lys Gly Asp Leu Gly Leu Pro Gly Trp Leu Gly Thr Lys Gly Asp
                          520
                                              525
Pro Gly Pro Pro Gly Ala Glu Gly Pro Pro Gly Leu Pro Gly Lys His
                      535
Gly Ala Ser Gly Pro Pro Gly Asn Lys Gly Ala Lys Gly Asp Met Val
                                     555
Val Ser Arg Val Lys Gly His Lys Gly Glu Arg Gly Pro Asp Gly Pro
           565
                       570
Pro Gly Phe Pro Gly Gln Pro Gly Ser His Gly Arg Asp Gly His Ala
                             585
Gly Glu Lys Gly Asp Pro Gly Pro Pro Gly Asp His Glu Asp Ala Thr
                          600
Pro Gly Gly Lys Gly Phe Pro Gly Pro Leu Gly Pro Pro Gly Lys Ala
                      615
                                         620
Gly Pro Val Gly Pro Pro Gly Leu Gly Phe Pro Gly Pro Pro Gly Glu
                                     635
Arg Gly His Pro Gly Val Pro Gly His Pro Gly Val Arg Gly Pro Asp
               645
                                  650
Gly Leu Lys Gly Gln Lys Gly Asp Thr Ile Ser Cys Asn Val Thr Tyr
                              665
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Pro Gly Arg His Gly Pro Pro Gly Phe Asp Gly Pro Pro Gly Pro Lys 680 Gly Phe Pro Gly Pro Gln Gly Ala Pro Gly Leu Ser Gly Ser Asp Gly 695 His Lys Gly Arg Pro Gly Thr Pro Gly Thr Ala Glu Ile Pro Gly Pro 710 715 Pro Gly Phe Arg Gly Asp Met Gly Asp Pro Gly Phe Gly Glu Lys 725 730 Gly Ser Ser Pro Val Gly Pro Pro Gly Pro Pro Gly Ser Pro Gly Val 740 745 750 Asn Gly Gln Lys Gly Ile Pro Gly Asp Pro Ala Phe Gly His Leu Gly 760 Pro Pro Gly Lys Arg Gly Leu Ser Gly Val Pro Gly Ile Lys Gly Pro 775 Arg Gly Asp Pro Gly Cys Pro Gly Ala Glu Gly Pro Ala Gly Ile Pro 790 795 Gly Phe Leu Gly Leu Lys Gly Pro Lys Gly Arg Glu Gly His Ala Gly 805 810 Phe Pro Gly Val Pro Gly Pro Pro Gly His Ser Cys Glu Arg Gly Ala 825 Pro Gly Ile Pro Gly Gln Pro Gly Leu Pro Gly Tyr Pro Gly Ser Pro 840 Gly Ala Pro Gly Gly Lys Gly Gln Pro Gly Asp Val Gly Pro Pro Gly 860 855 Pro Ala Gly Met Lys Gly Leu Pro Gly Leu Pro Gly Arg Pro Gly Ala 875 870 His Gly Pro Pro Gly Leu Pro Gly Ile Pro Gly Pro Phe Gly Asp Asp 885 ' 890 Gly Leu Pro Gly Pro Pro Gly Pro Lys Gly Pro Arg Gly Leu Pro Gly 900 905 Phe Pro Gly Phe Pro Gly Glu Arg Gly Lys Pro Gly Ala Glu Gly Cys 920 925 Pro Gly Ala Lys Gly Glu Pro Gly Glu Lys Gly Met Ser Gly Leu Pro 935 Gly Asp Arg Gly Leu Arg Gly Ala Lys Gly Ala Ile Gly Pro Pro Gly 950 955 Asp Glu Gly Glu Met Ala Ile Ile Ser Gln Lys Gly Thr Pro Gly Glu 965 970 Pro Gly Pro Pro Gly Asp Asp Gly Phe Pro Gly Glu Arg Gly Asp Lys 980 985 990 Gly Thr Pro Gly Met Gln Gly Arg Arg Gly Glu Leu Gly Arg Tyr Gly 1000 1005 Pro Pro Gly Phe His Arg Gly Glu Pro Gly Glu Lys Gly Gln Pro Gly 1015 1020 Pro Pro Gly Pro Pro Gly Pro Pro Gly Ser Thr Gly Leu Arg Gly Phe 1025 1030 1035 Ile Gly Phe Pro Gly Leu Pro Gly Asp Gln Gly Glu Pro Gly Ser Pro 1045 1050 1055 Gly Pro Pro Gly Phe Ser Gly Ile Asp Gly Ala Arg Gly Pro Lys Gly 1060 1065 1070 Asn Lys Gly Asp Pro Ala Ser His Phe Gly Pro Pro Gly Pro Lys Gly 1080 Glu Pro Gly Ser Pro Gly Cys Pro Gly His Phe Gly Ala Ser Gly Glu 1095 1100 Gln Gly Leu Pro Gly Ile Gln Gly Pro Arg Gly Ser Pro Gly Arg Pro 1110 1115 Gly Pro Pro Gly Ser Ser Gly Pro Pro Gly Cys Pro Gly Asp His Gly 1130 1125 Met Pro Gly Leu Arg Gly Gln Pro Gly Glu Met Gly Asp Pro Gly Pro

1140 1145 Arg Gly Leu Gln Gly Asp Pro Gly Ile Pro Gly Pro Pro Gly Ile Lys 1160 Gly Pro Ser Gly Ser Pro Gly Leu Asn Gly Leu His Gly Leu Lys Gly 1175 1180 Gln Lys Gly Thr Lys Gly Ala Ser Gly Leu His Asp Val Gly Pro Pro 1190 1195 Gly Pro Val Gly Ile Pro Gly Leu Lys Gly Glu Arg Gly Asp Pro Gly 1205 1210 1215 Ser Pro Gly Ile Ser Pro Pro Gly Pro Arg Gly Lys Lys Gly Pro Pro 1220 1225 1230 Gly Pro Pro Gly Ser Ser Gly Pro Pro Gly Pro Ala Gly Ala Thr Gly 1235 1240 1245 Arg Ala Pro Lys Asp Ile Pro Asp Pro Gly Pro Pro Gly Asp Gln Gly 1255 1260 Pro Pro Gly Pro Asp Gly Pro Arg Gly Ala Pro Gly Pro Pro Gly Leu 1265 1270 1275 Pro Gly Ser Val Asp Leu Leu Arg Gly Glu Pro Gly Asp Cys Gly Leu 1285 1290 1295 Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Pro Gly Tyr Lys 1300 1305 1310 Gly Phe Pro Gly Cys Asp Gly Lys Asp Gly Gln Lys Gly Pro Val Gly 1320 1325 Phe Pro Gly Pro Gln Gly Pro His Gly Phe Pro Gly Pro Pro Gly Glu 1330 1335 1340 Lys Gly Leu Pro Gly Pro Pro Gly Arg Lys Gly Pro Thr Gly Leu Pro 1350 1355 Gly Pro Arg Gly Glu Pro Gly Pro Pro Ala Asp Val Asp Asp Cys Pro 1365 1370 1375 Arg Ile Pro Gly Leu Pro Gly Ala Pro Gly Met Arg Gly Pro Glu Gly 1380 1385 1390 Ala Met Gly Leu Pro Gly Met Arg Gly Pro Ser Gly Pro Gly Cys Lys 1395 1400 1405 Gly Glu Pro Gly Leu Asp Gly Arg Arg Gly Val Asp Gly Val Pro Gly 1410 1415 1420 Ser Pro Gly Pro Pro Gly Arg Lys Gly Asp Thr Gly Glu Asp Gly Tyr 1425 1430 1435 1440 Pro Gly Gly Pro Gly Pro Gly Pro Ile Gly Asp Pro Gly Pro Lys 1445 1450 1455 Gly Phe Gly Pro Gly Tyr Leu Gly Gly Phe Leu Leu Val Leu His Ser 1460 1465 1470 Gln Thr Asp Gln Glu Pro Thr Cys Pro Leu Gly Met Pro Arg Leu Trp 1475 1480 1485 Thr Gly Tyr Ser Leu Leu Tyr Leu Glu Gly Gln Glu Lys Ala His Asn 1490 1495 1500 Gln Asp Leu Gly Leu Ala Gly Ser Cys Leu Pro Val Phe Ser Thr Leu 1505 1510 1515 1520 Pro Phe Ala Tyr Cys Asn Ile His Gln Val Cys His Tyr Ala Gln Arg 1525 1530 Asn Asp Arg Ser Tyr Trp Leu Ala Ser Ala Ala Pro Leu Pro Met Met 1540 1545 1550 Pro Leu Ser Glu Glu Ala Ile Arg Pro Tyr Val Ser Arg Cys Ala Val 1560 1565 Cys Glu Ala Pro Ala Gln Ala Val Ala Val His Ser Gln Asp Gln Ser 1575 1580 Ile Pro Pro Cys Pro Gln Thr Trp Arg Ser Leu Trp Ile Gly Tyr Ser 1585 1590 1595 Phe Leu Met His Thr Gly Ala Gly Asp Gln Gly Gly Gln Ala Leu 1605 1610

 Met Ser Pro Gly Ser Cys Leu Glu Asp Phe Arg Ala Ala Pro Phe Leu

 1620
 1625
 1630

 Glu Cys Gln Gly Arg Gln Gly Thr Cys His Phe Phe Ala Asn Lys Tyr
 1635
 1640
 1645

 Ser Phe Trp Leu Thr Thr Val Lys Ala Asp Phe Glu Phe Ser Ser Ala
 1650
 1655
 1660

 Pro Ala Pro Asp Thr Leu Lys Glu Ser Gln Ala Gln Arg Gln Lys Ile
 1675
 1680

 Ser Arg Cys Gln Val Cys Val Lys Tyr Ser *
 1690

<210> 1442 <211> 153 <212> PRT <213> Homo sapiens

<400> 1442 Met Gly Val Met Ala Pro Arg Thr Leu Leu Leu Leu Leu Leu Gly Ala 10 Leu Ala Leu Thr Glu Thr Trp Ala Gly Glu Cys Gly Val Gly Arg Glu . 20 25 Arg Ala Ser Ala Gly Arg Ser Glu Trp Pro Ala Arg Pro Gly Glu Pro 40 35 · Arg Arg Glu Glu Gly Arg Ala Gly Leu Ser Leu Ser Ser Pro Pro Gly 50 55 Ser His Ser Leu Arg Tyr Phe Ser Thr Ala Val Ser Gln Pro Gly Arg 70 75 Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Glu Phe 85 90 95 Val Arg Phe Asp Ser Asp Ser Val Ser Pro Arg Met Glu Arg Arg Ala 100 105 Pro Trp Val Glu Glu Glu Gly Leu Glu Tyr Trp Asp Gln Glu Thr Arg 120 Asn Ala Lys Gly His Ala Gln Ile Tyr Arg Val Asn Leu Arg Thr Leu 135 Leu Arg Tyr Tyr Asn Gln Ser Glu Ala 150 153

<210> 1443 <211> 58 <212> PRT <213> Homo sapiens

<210> 1444 <211> 69 <212> PRT <213> Homo sapiens

<210> 1445 <211> 826 <212> PRT <213> Homo sapiens

<400> 1445 Met Gly Trp Leu Cys Ser Gly Leu Leu Phe Pro Val Ser Cys Leu Val 10 Leu Leu Gln Val Ala Ser Ser Gly Asn Met Lys Val Leu Gln Glu Pro 25 20 Thr Cys Val Ser Asp Tyr Met Ser Ile Ser Thr Cys Glu Trp Lys Met 40 Asn Gly Pro Thr Asn Cys Ser Thr Glu Leu Arg Leu Leu Tyr Gln Leu 50 55 60 Val Phe Leu Leu Ser Glu Ala His Thr Cys Val Pro Glu Asn Asn Gly 70 75 Gly Ala Gly Cys Val Cys His Leu Leu Met Asp Asp Val Val Ser Ala 85 90 Asp Asn Tyr Thr Leu Asp Leu Trp Ala Gly Gln Gln Leu Leu Trp Lys 100 105 Gly Ser Phe Lys Pro Ser Glu His Val Lys Pro Arg Ala Pro Gly Asn 120 125 Leu Thr Val His Thr Asn Val Ser Asp Thr Leu Leu Leu Thr Trp Ser 135 140 Asn Pro Tyr Pro Pro Asp Asn Tyr Leu Tyr Asn His Leu Thr Tyr Ala 150 155 Val Asn Ile Trp Ser Glu Asn Asp Pro Ala Asp Phe Arg Ile Tyr Asn 170 175 Val Thr Tyr Leu Glu Pro Ser Leu Arg Ile Ala Ala Ser Thr Leu Lys 180 185 190 Ser Gly Ile Ser Tyr Arg Ala Arg Val Arg Ala Trp Ala Gln Cys Tyr 200 205 Asn Thr Thr Trp Ser Glu Trp Ser Pro Ser Thr Lys Trp His Asn Ser 215 220 Tyr Arg Glu Pro Phe Glu Gln His Leu Leu Leu Gly Val Ser Val Ser 235

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Cys Ile Val Ile Leu Ala Val Cys Leu Leu Cys Tyr Val Ser Ile Thr
                                 250
              245
                                         .
Lys Ile Lys Lys Glu Trp Trp Asp Gln Ile Pro Asn Pro Ala Arg Ser
                             265
           260
Arg Leu Val Ala Ile Ile Ile Gln Asp Ala Gln Gly Ser Gln Trp Glu
                         280
Lys Arg Ser Arg Gly Gln Glu Pro Ala Lys Cys Pro His Trp Lys Asn
                      295
Cys Leu Thr Lys Leu Leu Pro Cys Phe Leu Glu His Asn Met Lys Arg
                                     315
Asp Glu Asp Pro His Lys Ala Ala Lys Glu Met Pro Phe Gln Gly Ser
               325
                                 330
Gly Lys Ser Ala Trp Cys Pro Val Glu Ile Ser Lys Thr Val Leu Trp
           340
                             345
Pro Glu Ser Ile Ser Val Val Arg Cys Val Glu Leu Phe Glu Ala Pro
                         360
Val Glu Cys Glu Glu Glu Glu Val Glu Glu Glu Lys Gly Ser Phe
                     375
                                        380
Cys Ala Ser Pro Glu Ser Ser Arg Asp Asp Phe Gln Glu Gly Arg Glu
                                    395
                 390
Gly Ile Val Ala Arg Leu Thr Glu Ser Leu Phe Leu Asp Leu Leu Gly
                                 410
              405
Glu Glu Asn Gly Gly Phe Cys Gln Gln Asp Met Gly Glu Ser Cys Leu
                             425
          420
Leu Pro Pro Ser Gly Ser Thr Ser Ala His Met Pro Trp Asp Glu Phe
                         440
Pro Ser Ala Gly Pro Lys Glu Ala Pro Pro Trp Gly Lys Glu Gln Pro
                     455
                                        460
Leu His Leu Glu Pro Ser Pro Pro Ala Ser Pro Thr Gln Ser Pro Asp
                470
                                    475
Asn Leu Thr Cys Thr Glu Thr Pro Leu Val Ile Ala Gly Asn Pro Ala
              485 490
Tyr Arg Ser Phe Ser Asn Ser Leu Ser Gln Ser Pro Cys Pro Arg Glu
        500 505 510
Leu Gly Pro Asp Pro Leu Leu Ala Arg His Leu Glu Glu Val Glu Pro
               520
Glu Met Pro Cys Val Pro Gln Leu Ser Glu Pro Thr Thr Val Pro Gln
                     535
Pro Glu Pro Glu Thr Trp Glu Gln Ile Leu Arg Arg Asn Val Leu Gln
                  550
                                     555
His Gly Ala Ala Ala Pro Val Ser Ala Pro Thr Ser Gly Tyr Gln
                                570
Glu Phe Val His Ala Val Glu Gln Gly Gly Thr Gln Ala Ser Ala Val
                             585
Val Gly Leu Gly Pro Pro Gly Glu Ala Gly Tyr Lys Ala Phe Ser Ser
                         600
Leu Leu Ala Ser Ser Ala Val Ser Pro Glu Lys Cys Gly Phe Gly Ala
                     615
Ser Ser Gly Glu Glu Gly Tyr Lys Pro Phe Gln Asp Leu Ile Pro Gly
                  630
                                    635
Cys Pro Gly Asp Pro Ala Pro Val Pro Val Pro Leu Phe Thr Phe Gly
                   650
              645
Leu Asp Arg Glu Pro Pro Arg Ser Pro Gln Ser Ser His Leu Pro Ser
                            665
Ser Ser Pro Glu His Leu Gly Leu Glu Pro Gly Glu Lys Val Glu Asp
                         680
Met Pro Lys Pro Pro Leu Pro Gln Glu Gln Ala Thr Asp Pro Leu Val
                   695
                                         700
Asp Ser Leu Gly Ser Gly Ile Val Tyr Ser Ala Leu Thr Cys His Leu
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715 705 710 Cys Gly His Leu Lys Gln Cys His Gly Gln Glu Asp Gly Gln Thr 725 730 Pro Val Met Ala Ser Pro Cys Cys Gly Cys Cys Cys Gly Asp Arg Ala 740 745 Ser Pro Pro Thr Thr Pro Leu Arg Ala Pro Asp Pro Ser Pro Gly Gly 755 760 765 Val Pro Leu Glu Ala Ser Leu Cys Pro Ala Ser Leu Ala Pro Ser Gly 775 Ile Ser Glu Lys Ser Lys Ser Ser Ser Ser Phe His Pro Ala Pro Gly 790 795 800 Asn Ala Gln Ser Ser Ser Gln Thr Pro Lys Ile Val Asn Phe Val Ser 805 810 Val Gly Pro Thr Tyr Met Arg Val Ser * 820

<210> 1446 <211> 367 <212> PRT <213> Homo sapiens

<400> 1446 Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu 10 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu 20 25 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu 35 40 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg 55 Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly 75 70 Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu 85 90 95 Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His 105 . 110 Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu 125 120 Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu 135 140 Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr 150 155 Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly 165 170 Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly 185 Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe 200 205 Gly Arg Arg Gly Ile Leu Leu Ser Met Thr Leu Thr Gly Ile Ala 215 220 Ser Leu Val Leu Leu Gly Leu Trp Asp Tyr Leu Asn Glu Ala Ala Ile 230 235 240 Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala Ala Ile 245 250 Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val Arg Gly 265

<210> 1447 <211> 79 <212> PRT <213> Homo sapiens

<210> 1448 <211> 276 <212> PRT <213> Homo sapiens

<400> 1448 Met Val Trp Val Val Leu Leu Ser Leu Leu Cys Tyr Leu Val Leu Phe 10 15 1 5 Leu Cys Arg His Ser Ser His Arg Gly Val Phe Leu Ser Val Thr Ile 25 20 Leu Ile Tyr Leu Leu Met Gly Glu Met His Met Val Asp Thr Val Thr 35 40 Trp His Lys Met Arg Gly Ala Gln Met Ile Val Ala Met Lys Ala Val 55 Ser Leu Gly Phe Asp Leu Asp Arg Gly Glu Val Gly Thr Val Pro Ser 70 75 Pro Val Glu Phe Met Gly Tyr Leu Tyr Phe Val Gly Thr Ile Val Phe 85 90 Gly Pro Trp Ile Ser Phe His Ser Tyr Leu Gln Ala Val Gln Gly Arg 105 100 Pro Leu Ser Cys Arg Trp Leu Gln Lys Val Ala Arg Ser Leu Ala Leu 115 · 120 125 Ala Leu Leu Cys Leu Val Leu Ser Thr Cys Val Gly Pro Tyr Leu Phe

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140
               135
Pro Tyr Phe Ile Pro Leu Asn Gly Asp Arg Leu Leu Arg Lys Trp Leu
145 150 155 160
Arg Ala Tyr Glu Ser Ala Val Ser Phe His Phe Ser Asn Tyr Phe Val
      165 170 175
Gly Phe Leu Ser Glu Ala Thr Ala Thr Leu Ala Gly Ala Gly Phe Thr
   180 185 190
Glu Glu Lys Asp His Leu Glu Trp Asp Leu Thr Val Ser Lys Pro Leu
195 200
Asn Val Glu Leu Pro Arg Ser Met Val Glu Val Val Thr Ser Trp Asn
210 215
                               220
Leu Pro Met Ser Tyr Trp Leu Asn Asn Tyr Gly Phe Lys Asn Ala Leu
           230 235
Arg Leu Gly Thr Leu Leu Gly Cys Ala Gly His Leu Cys Ser Gln Arg
           245 250 255
Pro Ser Lys Leu Leu Lys Phe Pro Pro Gly Trp Gly Pro Cys Cys Pro
Gly Phe Leu *
     275
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<210> 1449 <211> 597 <212> PRT <213> Homo sapiens

<400> 1449 Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Lys Gly 5 10 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln 25 20 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe 40 45 35 Ser Ser Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 55 60 Val Trp Val Ser Arg Ile Asn Thr Asp Gly Ser Ser Thr Ser Tyr Ala 70 75 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn 85 90 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val 105 Tyr Tyr Cys Ala Arg Ala Asp Asn Cys Ser Ser Thr Ser Cys Tyr Lys 120 125 Cys Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 135 140 Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu Val Ser Cys Glu Asn Ser 145 150 155 Pro Ser Asp Thr Ser Ser Val Ala Val Gly Cys Leu Ala Gln Asp Phe 170 175 165 Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys Tyr Lys Asn Asn Ser Asp 190 185 Ile Ser Ser Thr Arg Gly Phe Pro Ser Val Leu Arg Gly Gly Lys Tyr 195 200 Ala Ala Thr Ser Gln Val Leu Leu Pro Ser Lys Asp Val Met Gln Gly 210 215 220 Thr Asp Glu His Val Val Cys Lys Val Gln His Pro Asn Gly Asn Lys 230 235

```
Glu Lys Asn Val Pro Leu Pro Val Ile Ala Glu Leu Pro Pro Lys Val
                          250 255
Ser Val Phe Val Pro Pro Arg Asp Gly Phe Phe Gly Asn Pro Arg Lys
                       265 270
Ser Lys Leu Ile Cys Gln Ala Thr Gly Phe Ser Pro Arg Gln Ile Gln
                           285
            280
Val Ser Trp Leu Arg Glu Gly Lys Gln Val Gly Ser Gly Val Thr Thr
  290 295 300
Asp Gln Val Gln Ala Glu Ala Lys Glu Ser Gly Pro Thr Thr Tyr Lys
    310 315
Val Thr Ser Thr Leu Thr Ile Lys Glu Ser Asp Trp Leu Ser Gln Ser
    325
                          330
Met Phe Thr Cys Arg Val Asp His Arg Gly Leu Thr Phe Gln Gln Asn
                        345 350
      340
Ala Ser Ser Met Cys Val Pro Asp Gln Asp Thr Ala Ile Arg Val Phe
                    360 365
Ala Ile Pro Pro Ser Phe Ala Ser Ile Phe Leu Thr Lys Ser Thr Lys
                 375
                                380
Leu Thr Cys Leu Val Thr Asp Leu Thr Thr Tyr Asp Ser Val Thr Ile
                             395 400
              390
Ser Trp Thr Arg Gln Asn Gly Glu Ala Val Lys Thr His Thr Asn Ile
           405 410 415
Ser Glu Ser His Pro Asn Ala Thr Phe Ser Ala Val Gly Glu Ala Ser
            425
Ile Cys Glu Asp Asp Trp Asn Ser Gly Glu Arg Phe Thr Cys Thr Val
     435 440
                                  445
Thr His Thr Asp Leu Pro Ser Pro Leu Lys Gln Thr Ile Ser Arg Pro
                                 460
                 455
Lys Gly Val Ala Leu His Arg Pro Asp Val Tyr Leu Leu Pro Pro Ala
                            475 480
   470
Arg Glu Gln Leu Asn Leu Arg Glu Ser Ala Thr Ile Thr Cys Leu Val
      485 490
Thr Gly Phe Ser Pro Ala Asp Val Phe Val Gln Trp Met Gln Arg Gly
      500 505
Gln Pro Leu Ser Pro Glu Lys Tyr Val Thr Ser Ala Pro Met Pro Glu
 515 520 525
Pro Gln Ala Pro Gly Arg Tyr Phe Ala His Ser Ile Leu Thr Val Ser
 530 535 540
Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr Thr Cys Val Val Ala His
                     555
     550
Glu Ala Leu Pro Asn Arg Val Thr Glu Arg Thr Val Asp Lys Ser Thr
           565
                         570
Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val Met Ser Asp Thr Ala
        580
                        585
                                       590
Gly Thr Cys Tyr *
      595 596
```

<210> 1450
<211> 276
<212> PRT
<213> Homo sapiens

```
25
Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr
               40
Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His
                     55
Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val
            70
Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe
                                 90
Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser
Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr
                         120
                                           125
Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp
          , 135
Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr
                                   155
                  150
Thr Val Ala Asn Gln Phe Ser Cys Lys Cys Leu Thr Gly Phe Thr Gly
                                170
              165
Gln Lys Cys Glu Thr Asp Val Asn Glu Cys Asp Ile Pro Gly His Cys
                             185
                                     190
Gln His Gly Gly Ile Cys Leu Asn Leu Pro Gly Ser Tyr Gln Cys Gln
                        200
                                          205
Cys Leu Gln Gly Phe Thr Gly Gln Tyr Cys Asp Ser Leu Tyr Val Pro
                                       220
                    215
Cys Ala Pro Ser Pro Cys Val Asn Gly Gly Thr Cys Arg Gln Thr Gly
                                    235
                 230
Asp Phe Thr Phe Glu Cys Asn Cys Leu Pro Glu Thr Val Arg Arg Gly
             245
                       250
Thr Glu Leu Trp Glu Arg Asp Arg Glu Val Trp Asn Gly Lys Glu His
   260
                            265
Asp Glu Asn *
  275
```

<210> 1451 <211> 121 <212> PRT <213> Homo sapiens

<400> 1451 Met Glu Ser Gly Leu Ser Trp Ile Phe Leu Leu Ala Ile Leu Lys Gly 10 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln 25 20 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Arg Phe 40 35 Asp Glu Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 55 Glu Trp Val Gly Gly Ile Ser Trp Asn Arg Asp Ser Ile Ala Tyr Ala 70 75 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Gln Ser 90 85 Tyr Val Tyr Leu Gln Met Asn Ser Leu Arg His Glu Asp Thr Ala Leu 105 100 Tyr Tyr Cys Thr Lys Leu Arg Ser Ser 115 120 121

<210> 1452 <211> 48 <212> PRT <213> Homo sapiens

<210> 1453 <211> 123 <212> PRT <213> Homo sapiens

<400> 1453 Met Ile Thr Val Gln Phe Ser Tyr Thr Ala Val Lys Trp Leu Leu Asn Cys Phe Val Leu Ile Leu Tyr Val Ile Leu Ser Ile Leu Phe Gln Val 25 Ser Gln Lys Asn Ser Ser Lys Leu Gly Arg Phe Lys Asn Leu Phe Asn 40 His Lys Glu Cys Ser Lys Leu Leu Phe Asn Arg Asn Gln Ala Gln Thr 55 Leu Glu Leu Thr Ala Asp Arg Ile Arg Phe Gly Leu Phe Pro Glu Trp . 70 75 Lys His Phe Ser His Thr Thr Ser Leu Cys Thr Ala Lys Met Leu Ala 85 90 Tyr Pro Leu Trp Phe Pro Ser Phe Ser Leu Ala Ser Gln Arg Asn Leu 100 105 Pro Pro His Pro Leu Tyr Tyr Ile Phe Tyr * 120 122

<210> 1454 <211> 327 <212> PRT <213> Homo sapiens

```
50
                   55
Leu Leu His Gly Phe Pro Thr Ser Ser Tyr Asp Trp Tyr Lys Ile Trp
                                75
           70
Glu Gly Leu Thr Leu Arg Phe His Arg Val Ile Ala Leu Asp Phe Leu
                             90
Gly Phe Gly Phe Ser Asp Lys Pro Arg Pro His His Tyr Ser Ile Phe
         100 105 110
Glu Gln Ala Ser Ile Val Glu Ala Leu Leu Arg His Leu Gly Leu Gln
                     120 125
Asn Arg Arg Ile Asn Leu Leu Ser His Asp Tyr Gly Asp Ile Val Ala
   130 135 140
Gln Glu Leu Leu Tyr Arg Tyr Lys Gln Asn Arg Ser Gly Arg Leu Thr
               150
                               155
Ile Lys Ser Leu Cys Leu Ser Asn Gly Gly Ile Phe Pro Glu Thr His
                           170
Arg Pro Leu Leu Gln Lys Leu Leu Lys Asp Gly Gly Val Leu Ser
                         185
Pro Ile Leu Thr Arg Leu Met Asn Phe Phe Val Phe Ser Arg Gly Leu
                              ` 205
     195 200
Thr Pro Val Phe Gly Pro Tyr Thr Arg Pro Ser Glu Ser Glu Leu Trp
                  215
                                   220
Asp Met Trp Ala Gly Ile Arg Asn Asn Asp Gly Asn Leu Val Ile Asp
               230
                                235
Ser Leu Leu Gln Tyr Ile Asn Gln Arg Lys Lys Phe Arg Arg Trp
            245
                            250
                                              255
Val Gly Ala Leu Ala Ser Val Thr Ile Pro Ile His Phe Ile Tyr Gly
        260 265
Pro Leu Asp Pro Val Asn Pro Tyr Pro Glu Phe Leu Glu Leu Tyr Arg
   275 280
Lys Thr Leu Pro Arg Ser Thr Val Ser Ile Leu Asp Asp His Ile Ser
  290 295
                            300
His Tyr Pro Gln Leu Glu Asp Pro Met Gly Phe Leu Asn Ala Tyr Met
                               315
      310
Gly Phe Ile Asn Ser Phe *
            325 326
```

<210> 1455 <211> 57 <212> PRT <213> Homo sapiens

<210> 1456 <211> 48 <212> PRT

<213> Homo sapiens

<210> 1457 <211> 459 <212> PRT <213> Homo sapiens

<400> 1457 Met Ser Asp Leu Leu Ser Val Phe Leu His Leu Leu Leu Leu Phe Lys Leu Val Ala Pro Val Thr Phe Arg His His Arg Tyr Asp Asp Leu Val 25 Arg Thr Leu Tyr Lys Val Gln Asn Glu Cys Pro Gly Ile Thr Arg Val 40 Tyr Ser Ile Gly Arg Ser Val Glu Gly Arg His Leu Tyr Val Leu Glu 55 Phe Ser Asp His Pro Gly Ile His Glu Pro Leu Glu Pro Glu Val Lys 70 Tyr Val Gly Asn Met His Gly Asn Glu Ala Leu Gly Arg Glu Leu Met 90 Leu Gln Leu Ser Glu Phe Leu Cys Glu Glu Phe Arg Asn Arg Asn Gln 100 105 Arg Ile Val Gln Leu Ile Gln Asp Thr Arg Ile His Ile Leu Pro Ser 125 120 Met Asn Pro Asp Gly Tyr Glu Val Ala Ala Ala Gln Gly Pro Asn Lys 135 Pro Gly Tyr Leu Val Gly Arg Asn Asn Ala Asn Gly Val Asp Leu Asn 150 155 Arg Asn Phe Pro Asp Leu Asn Thr Tyr Ile Tyr Tyr Asn Glu Lys Tyr 165 170 Gly Gly Pro Asn His His Leu Pro Leu Pro Asp Asn Trp Lys Ser Gln 185 Val Glu Pro Glu Thr Arg Ala Val Ile Arg Trp Met His Ser Phe Asn 200 Phe Val Leu Ser Ala Asn Leu His Gly Gly Ala Val Val Ala Asn Tyr 215 220 Pro Tyr Asp Lys Ser Phe Glu His Arg Val Arg Gly Val Arg Arg Thr 230 235 Ala Ser Thr Pro Thr Pro Asp Asp Lys Leu Phe Gln Lys Leu Ala Lys 250 245 Val Tyr Ser Tyr Ala His Gly Trp Met Phe Gln Gly Trp Asn Cys Gly 265 260 Asp Tyr Phe Pro Asp Gly Ile Thr Asn Gly Ala Ser Trp Tyr Ser Leu 280 Ser Lys Gly Met Gln Asp Phe Asn Tyr Leu His Thr Asn Cys Phe Glu 295 300 Ile Thr Leu Glu Leu Ser Cys Asp Lys Phe Pro Pro Glu Glu Glu Leu

315 305 310 Gln Arg Glu Trp Leu Gly Asn Arg Glu Ala Leu Ile Gln Phe Leu Glu 330 335 325 Gln Val His Gln Gly Ile Lys Gly Met Val Leu Asp Glu Asn Tyr Asn 345 Asn Leu Ala Asn Ala Val Ile Ser Val Ser Gly Ile Asn His Asp Val 360 Thr Ser Gly Asp His Gly Asp Tyr Phe Arg Leu Leu Pro Gly Ile 375 Tyr Thr Val Ser Ala Thr Ala Pro Gly Tyr Asp Pro Glu Thr Val Thr 390 395 Val Thr Val Gly Pro Ala Glu Pro Thr Leu Val Asn Phe His Leu Lys 405 410 415 Arg Ser Ile Pro Gln Val Ser Pro Val Arg Arg Ala Pro Ser Arg Arg 420 425 430 His Gly Val Arg Ala Lys Val Gln Pro Gln Pro Arg Lys Lys Glu Met 440 Glu Met Arg Gln Leu Gln Arg Gly Pro Ala * 455

<210> 1458 <211> 463 <212> PRT

<213> Homo sapiens

<400> 1458 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu 10 Cys Trp Ser Leu Ala Ile Ala Thr Pro Leu Pro Pro Thr Ser Ala His 20 25 Gly Asn Val Ala Glu Gly Glu Thr Lys Pro Asp Pro Asp Val Thr Glu 40 Arg Cys Ser Asp Gly Trp Ser Phe Asp Ala Thr Thr Leu Asp Asp Asn 60 55 Gly Thr Met Leu Phe Phe Lys Gly Glu Phe Val Trp Lys Ser His Lys 70 75 Trp Asp Arg Glu Leu Ile Ser Glu Arg Trp Lys Asn Phe Pro Ser Pro 85 90 Val Asp Ala Ala Phe Arg Gln Gly His Asn Ser Val Phe Leu Ile Lys 105 Gly Asp Lys Val Trp Val Tyr Pro Pro Glu Lys Lys Glu Lys Gly Tyr 115 120 125 Pro Lys Leu Leu Gln Asp Glu Phe Pro Gly Ile Pro Ser Pro Leu Asp 135 140 130 Ala Ala Val Glu Cys His Arg Gly Glu Cys Gln Ala Glu Gly Val Leu 150 155 Phe Phe Gln Gly Asp Arg Glu Trp Phe Trp Asp Leu Ala Thr Gly Thr 165 170 175 Met Lys Glu Arg Ser Trp Pro Ala Val Gly Asn Cys Ser Ser Ala Leu 190 185 Arg Trp Leu Gly Arg Tyr Tyr Cys Phe Gln Gly Asn Gln Phe Leu Arg 205 200 Phe Asp Pro Val Arg Gly Glu Val Pro Pro Arg Tyr Pro Arg Asp Val 215 220 Arg Asp Tyr Phe Met Pro Cys Pro Gly Arg Gly His Gly His Arg Asn 235

Gly Thr Gly His Gly Asn Ser Thr His His Gly Pro Glu Tyr Met Arg 250 245 Cys Ser Pro His Leu Val Leu Ser Ala Leu Thr Ser Asp Asn His Gly 260 265 Ala Thr Tyr Ala Phe Ser Gly Thr His Tyr Trp Arg Leu Asp Thr Ser 275 280 Arg Asp Gly Trp His Ser Trp Pro Ile Ala His Gln Trp Pro Gln Gly 295 Pro Ser Ala Val Asp Ala Ala Phe Ser Trp Glu Glu Lys Leu Tyr Leu 315 310 Val Gln Gly Thr Gln Val Tyr Val Phe Leu Thr Lys Gly Gly Tyr Thr 330 335 Leu Val Ser Gly Tyr Pro Lys Arg Leu Glu Lys Glu Val Gly Thr Pro 345 350 340 His Gly Ile Ile Leu Asp Ser Val Asp Ala Ala Phe Ile Cys Pro Gly 365 360 Ser Ser Arg Leu His Ile Met Ala Gly Arg Arg Leu Trp Trp Leu Asp 375 380 Leu Lys Ser Gly Ala Gln Ala Thr Trp Thr Glu Leu Pro Trp Pro His 390 395 Glu Lys Val Asp Gly Ala Leu Cys Met Glu Lys Ser Leu Gly Pro Asn 405 410 Ser Cys Ser Ala Asn Gly Pro Gly Leu Tyr Leu Ile His Gly Pro Asn 425 430 420 Leu Tyr Cys Tyr Ser Asp Val Glu Lys Leu Asn Ala Ala Lys Ala Leu 435 440 Pro Gln Pro Gln Asn Val Thr Ser Leu Leu Gly Cys Thr His * 455 460 462

<210> 1459 <211> 187 <212> PRT <213> Homo sapiens

<400> 1459 Met Gln Pro Ile Val Ala Lys Ala Leu Val Val Leu Leu Glu Val His 5 10 Pro Leu Gln Asp Gln Ala Glu Ser Gly Arg Leu Gly His Val His Leu 25 20 Leu Cys Ala Pro Ala Ala Leu Gln His Ala Leu Arg Gly Ile Thr Leu 40 45 His Asn Gly His His Gln Ala Asp His Leu Pro Asp Leu Met His His 55 Glu Ala Leu Ala Leu His Pro Asp His Arg Lys Leu Gln Ala Leu Pro 70 75 His Lys Gly Phe Leu Ala Val His Leu Gln Asp Val Ala Ala Gly Thr 90 Gly Ile Leu Arg Pro Leu Leu Arg Gly Glu Ile Val Glu Val Val Arg 105 Ala Leu Val Ala Gly Gln Glu Pro Val Asp Leu Leu Gln Arg Leu Gly 120 Ala Gln Ala Val Gly Leu Ile Leu Asn Val Pro Val Leu Val Arg Lys 135 140 Gly Lys Arg Gly Gln Gln Val Ala Ile Gly Pro Gly Ile Thr Ser Val 150 155 Leu Gly Val Lys Pro Ala Arg Asp Pro Leu Gln Ser Gln Asn Pro Asn

165 170 175
Val Arg Gly Lys Val Ala Val Asp Leu Phe *
180 185 186

<210> 1460 <211> 223 <212> PRT <213> Homo sapiens

<400> 1460 Met Lys Phe Ala Leu Phe Thr Ser Gly Val Ala Leu Thr Leu Ser Phe 10 15 1 5 Val Phe Met Tyr Ala Lys Cys Glu Asn Glu Pro Phe Ala Gly Val Ser 25 20 Glu Ser Tyr Asn Gly Thr Gly Glu Leu Gly Asn Leu Ile Ala Pro Cys 40 Asn Ala Asn Cys Asn Cys Ser Arg Ser Tyr Tyr Tyr Pro Val Cys Gly 55 60 Asp Gly Val Gln Tyr Phe Ser Pro Cys Phe Ala Gly Cys Ser Asn Pro 75 70 Val Ala His Arg Lys Pro Lys Val Tyr Tyr Asn Cys Ser Cys Ile Glu 90 85 Arg Lys Thr Glu Ile Thr Ser Thr Ala Glu Thr Phe Gly Phe Glu Ala 105 110 Asn Ala Gly Lys Cys Glu Thr His Cys Ala Lys Leu Ala Ile Phe Leu 125 120 Cys Ile Val Phe Ile Gly Asn Ile Phe Thr Phe Met Ala Arg Ser Pro 140 135 Ile Thr Gly Ala Ile Pro Arg Gly Gly Asn His Arg Gln Arg Pro Pro 155 160 150 Thr Leu Gly Ile Gln Phe Met Ala Leu Arg Thr Leu Trp Thr Thr Pro 165 170 175 Trp Pro Ser Lys Thr Gly Cys Pro Ile His Gln Pro Gly Ser Leu Trp 180 185 190 Glu Lys Leu Gly Trp Arg Pro Leu Lys Thr Leu Arg Arg Pro Lys Pro 195 200 205 Ser Trp Asn Ala Leu Leu Ala Leu Ala His Pro Arg Ser Phe Gln 220

<210> 1461 <211> 210 <212> PRT <213> Homo sapiens

Arg Val Val Pro Leu Asn Pro Ala Thr Lys Leu Ser Pro Leu Glu Ser 70 Gln Met Ala Leu His Thr Lys Ala Val Glu Ala Gly Met Val Phe Gly 90 85 His Arg Ala Glu His Lys Asp Pro Arg Ser Val Trp Glu Ser Tyr Trp 105 Leu Leu Gly Ser Pro Trp Ala Glu Val Thr Arg Leu His Pro Arg Arg 115 120 125 Ala Gln Leu Gly Ser Leu Pro Pro Pro Asp Pro Arg Thr Thr His Arg 130 . 135 140 Arg Gly Ala Val Ser Ile Phe Leu Lys Gly Pro Phe Gly Asp Leu Val 150 155 Leu Ser Val Glu Arg Thr Asp Val Ala Leu Ser Ser Gln His Ile Pro 165 170 Gly Ser Gly Arg Pro Gln Leu Lys Gln Cys Gln Gly Pro Gln Gly Ser 185 190 His Leu Asp Arg Pro Thr Ala Cys Asn Ser Ala Leu Leu Arg Arg Gln 200 ,205 His * 209

<210> 1462 <211> 56 <212> PRT <213> Homo sapiens

<210> 1463 <211> 66 <212> PRT <213> Homo sapiens

```
<210> 1464
<211> 200
<212> PRT
<213> Homo sapiens
```

<400> 1464 Met Val Trp Arg Arg Leu Leu Arg Lys Arg Trp Val Leu Ala Leu Val 10 Phe Gly Leu Ser Leu Val Tyr Phe Leu Ser Ser Thr Phe Lys Gln Glu 25 20 Glu Arg Ala Val Arg Asp Arg Asn Leu Leu Gln Val His Asp His Asn 40 Gln Pro Ile Pro Trp Lys Val Gln Phe Asn Leu Gly Asn Ser Ser Arg 55 60 Pro Ser Asn Gln Cys Arg Asn Ser Ile Gln Gly Lys His Leu Ile Thr 75 70 Asp Glu Leu Gly Tyr Val Cys Glu Arg Lys Asp Leu Leu Val Asn Gly 85 90 Cys Cys Asn Val Asn Val Pro Ser Thr Lys Gln Tyr Cys Cys Asp Gly 105 110 Cys Trp Pro Asn Gly Cys Cys Ser Ala Tyr Glu Tyr Cys Val Ser Cys 125 120 Cys Leu Gln Pro Asn Lys Gln Leu Leu Leu Glu Arg Phe Leu Asn Arg 135 140 Ala Ala Val Ala Phe Gln Asn Leu Phe Met Ala Val Glu Asp His Phe 150 155 Glu Leu Cys Leu Ala Lys Cys Arg Thr Ser Ser Gln Ser Val Gln His 165 170 175 Glu Asn Thr Tyr Arg Asp Pro Ile Ala Lys Tyr Cys Tyr Gly Glu Ser 185 180 Pro Pro Glu Leu Phe Pro Ala * 195 199

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<210> 1465
<211> 46
<212> PRT
<213> Homo sapiens
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<210> 1466 <211> 56 <212> PRT <213> Homo sapiens

<210> 1467 <211> 366 <212> PRT <213> Homo sapiens

<400> 1467 Met Arg Gly Gln Val Val Thr Leu Ile Leu Leu Leu Leu Leu Lys Val 10 Tyr Gln Gly Lys Gly Cys Gln Gly Ser Ala Asp His Val Val Ser Ile 25 Ser Gly Val Pro Leu Gln Leu Gln Pro Asn Ser Ile Gln Thr Lys Val 40 Asp Ser Ile Ala Trp Lys Lys Leu Leu Pro Ser Gln Asn Gly Phe His 55 His Ile Leu Lys Trp Glu Asn Gly Ser Leu Pro Ser Asn Thr Ser Asn ` 70 75 Asp Arg Phe Ser Phe Ile Val Lys Asn Leu Ser Leu Leu Ile Lys Ala 90 Ala Gln Gln Asp Ser Gly Leu Tyr Cys Leu Glu Val Thr Ser Ile 105 Ser Gly Lys Val Gln Thr Ala Thr Phe Gln Val Phe Val Phe Asp Lys 115 120 125 Val Glu Lys Pro Arg Leu Gln Gly Gln Gly Lys Ile Leu Asp Arg Gly 130 135 140 Arg Cys Gln Val Ala Leu Ser Cys Leu Val Ser Arg Asp Gly Asn Val 150 155 Ser Tyr Ala Trp Tyr Arg Gly Ser Lys Leu Ile Gln Thr Ala Gly Asn 170 175 Leu Thr Tyr Leu Asp Glu Glu Val Asp Ile Asn Gly Thr His Thr Tyr 180 185 Thr Cys Asn Val Ser Asn Pro Val Ser Trp Glu Ser His Thr Leu Asn 200 Leu Thr Gln Asp Cys Gln Asn Ala His Gln Glu Phe Arg Phe Trp Pro 215 Phe Leu Val Ile Ile Val Ile Leu Ser Ala Leu Phe Leu Gly Thr Leu 230 235 Ala Cys Phe Cys Val Trp Arg Arg Lys Arg Lys Glu Lys Gln Ser Glu 250 Thr Ser Pro Lys Glu Phe Leu Thr Ile Tyr Glu Asp Val Lys Asp Leu 260 265 270 Lys Thr Arg Arg Asn His Glu Gln Glu Gln Thr Phe Pro Gly Gly Gly 285 275 280 Ser Thr Ile Tyr Ser Met Ile Gln Ser Gln Ser Ser Ala Pro Thr Ser 290 295 300 Gln Glu Pro Ala Tyr Thr Leu Tyr Ser Leu Ile Gln Pro Ser Arg Lys

<210> 1468 <211> 57 <212> PRT <213> Homo sapiens

<210> 1469 <211> 110 <212> PRT <213> Homo sapiens

<400> 1469 Met Leu Glu Ile Leu Leu Lys Leu Val Arg Leu Leu Thr Thr Gln Pro 5 10 Tyr Leu Thr Leu Phe Gln Ala Val Arg Asn Leu Ala Leu Asn Leu Ser 20 25 Thr Ser Ser Gly Ser Leu Gly Pro Ala Pro Gly Glu Pro Arg Ala Gly 40 Pro Leu Ala Pro Glu Gly Pro Arg Pro Leu Gly Ser Gly Pro Leu Gly 55 60 Pro Arg Gly Leu Arg Ala Ser Gly Arg Arg Arg Ala Ser Ser Gly Leu 75 70 Leu Leu Arg Tyr Cys Ala Ala Ala Gly Asp Thr Glu Phe Met Asp Ala 90 85 Pro Gly Gly Arg Thr Glu Gly Pro Gly Gly Gly Leu Arg Pro 105

<210> 1470 <211> 59 <212> PRT <213> Homo sapiens

<400> 1470

<210> 1471 <211> 123 <212> PRT <213> Homo sapiens

<400> 1471 Met Met His Phe Leu Thr Gly Gly Trp Lys Val Leu Phe Ala Cys Val 10 Pro Pro Thr Glu Tyr Cys His Gly Trp Ala Cys Phe Gly Val Ser Ile 25 Leu Val Ile Gly Leu Leu Thr Ala Leu Ile Gly Asp Leu Ala Ser His Phe Gly Cys Thr Val Gly Leu Lys Asp Ser Val Asn Ala Val Val Phe 55 Val Ala Leu Gly Thr Ser Ile Pro Gly Asn Thr Leu Gly Asp Phe Gly 70 Gly Val Gly Ser Gln Met Ser Gln Ala Gly Ala Thr Gln Asp Pro Ala 90 85 Glu Met Arg His Val Arg Gln Gln Gly Gly Gly Ala Ala Gly Pro Val 105 Arg Arg Arg Val His Arg Glu Arg Asp Pro Leu 120

<210> 1472 <211> 316 <212> PRT <213> Homo sapiens

<400> 1472 Met Val Ser Ala Ser Gly Thr Ser Phe Phe Lys Gly Met Leu Leu Gly 10 Ser Ile Ser Trp Val Leu Ile Thr Met Phe Gly Gln Ile His Ile Arg 25 His Arg Gly Gln Thr Gln Asp His Glu His His Leu Arg Pro Pro 40 Asn Arg Asn Asp Phe Leu Asn Thr Ser Lys Val Ile Leu Leu Glu Leu 55 60 Ser Lys Ser Ile Arg Val Phe Cys Ile Ile Phe Gly Glu Ser Glu Asp 70 75 Glu Ser Tyr Trp Ala Val Leu Lys Glu Thr Trp Thr Lys His Cys Asp 85 90 Lys Ala Glu Leu Tyr Asp Thr Lys Asn Asp Asn Leu Phe Asn Ile Glu 105 110 Ser Asn Asp Arg Trp Val Gln Met Arg Thr Ala Tyr Lys Tyr Val Phe

120 115 Glu Lys Asn Gly Asp Asn Tyr Asn Trp Phe Phe Leu Ala Leu Pro Thr 135 140 Thr Phe Ala Val Ile Glu Asn Leu Lys Tyr Leu Leu Phe Thr Arg Asp 150 155 160 Ala Ser Gln Pro Phe Tyr Leu Gly His Thr Val Ile Phe Gly Asp Leu 165 170 175 Glu Tyr Val Thr Val Glu Gly Gly Ile Val Leu Ser Arg Glu Leu Met 180 185 190 Lys Arg Leu Asn Arg Leu Leu Asp Asn Ser Glu Thr Cys Ala Asp Gln 195 200 Ser Val Ile Trp Lys Leu Ser Glu Asp Lys Gln Leu Ala Ile Cys Leu 215 220 Lys Tyr Ala Gly Val His Ala Glu Asn Ala Glu Asp Tyr Glu Gly Arg 235 225 230 Asp Val Phe Asn Thr Lys Pro Ile Ala Gln Leu Ile Glu Glu Ala Leu 245 250 Ser Asn Asn Pro Gln Gln Val Val Glu Gly Cys Cys Ser Asp Met Ala 260 265 270 Ile Thr Phe Asn Gly Leu Thr Pro Gln Lys Met Glu Val Met Met Tyr 280 285 Gly Leu Tyr Arg Leu Arg Ala Phe Gly His Tyr Phe Asn Asp Thr Leu 295 Val Phe Leu Pro Pro Val Gly Ser Glu Asn Asp * 310

<210> 1473 <211> 65 <212> PRT

<213> Homo sapiens

<210> 1474 <211> 55 <212> PRT <213> Homo sapiens

 $^{<400>}$ 1474 Met Ile Phe Met Arg Val Leu Met Leu Cys Cys Met Asp Ser Leu 1 5 10 15 Gly Ser Leu Asp Thr Phe Gln Trp Leu Ser Arg Val Leu Cys Pro Thr 20 25 30

Glu Asn Leu Ile Phe Glu Leu Asn Gly Tyr Glu Leu Asn Ser Thr Trp

35
40
45
Phe Gly Trp Leu Asn Thr *
50
54

<210> 1475 <211> 128 <212> PRT <213> Homo sapiens <221> misc feature

<222> (1)...(128)
<223> Xaa = any amino acid or nothing

<400> 1475 Met Lys Phe Gln Leu Phe Leu Ser Tyr Val Phe Ile Thr Gln Val Phe 10 Ser Arg Pro Phe Gln Ser Asn Leu Gly Ser Leu Thr Pro Ala Ser Ser Gln Ile Pro Leu Gln Leu Pro Lys Ala Leu Cys Val Arg Cys Leu Asn 40 Thr Val Xaa Xaa Xaa Xaa Xaa Thr Gly Phe Gly Lys Phe Gln Ile Thr 55 Ile Gln Ser Pro Gly Gly Pro Leu Val Leu Ala Arg Pro Trp Ala Ser 70 Lys Phe Pro Ser Pro Lys Phe Xaa Xaa Xaa Xaa Xaa Pro Lys Met 90 Gly Gly Lys Thr Phe Ala Tyr Gly Arg Ile Asn Pro Thr Arg Pro Ala 110 105 Lys Asn Xaa Xaa Xaa Xaa Xaa Ser Leu Ala Ser Leu Asn Pro Thr

<210> 1476 <211> 210 <212> PRT <213> Homo sapiens

<400> 1476 Met Tyr Phe Phe Leu Leu Leu Phe Phe Asn Val Gln Arg Leu Ala 1 5 10 Phe Pro Phe Gly Ile Pro Asn Asp Pro Met Leu Trp Ser Glu Gly Gln 20 25 Ser His Leu Cys Trp Arg Ser Pro Leu Ile Pro Ser Ala Gln Phe Arg 40 Gly Ser Arg Ala Asp Ile Arg Gly Ser Met Leu His Ser Ser Ser Gly 60 Arg Val Val Pro Leu Asn Pro Ala Thr Lys Leu Ser Pro Leu Glu Ser 70 75 Gln Met Ala Leu His Thr Lys Ala Val Glu Ala Gly Met Val Phe Gly 85 90 His Arg Ala Glu His Lys Asp Pro Arg Ser Val Trp Glu Ser Tyr Trp

100 105 Leu Leu Gly Ser Pro Trp Ala Glu Val Thr Arg Leu His Pro Arg Arg 125 120 Ala Gln Leu Gly Ser Leu Pro Pro Pro Asp Pro Arg Thr Thr His Arg 135 Arg Gly Ala Val Ser Ile Phe Leu Lys Gly Pro Phe Gly Asp Leu Val 150 155 Leu Ser Val Glu Arg Thr Asp Val Ala Leu Ser Ser Gln His Ile Pro 170 Gly Ser Gly Arg Pro Gln Leu Lys Gln Cys Gln Gly Pro Gln Gly Ser 180 185 His Leu Asp Arg Pro Thr Ala Cys Asn Ser Ala Leu Leu Arg Arg Gln 200 His * 209

<210> 1477 <211> 57 <212> PRT <213> Homo sapiens

50 55 56

<210> 1478 <211> 97 <212> PRT <213> Homo sapiens

 A400> 1478
 Arg Ala Val Gly Asp Gly Pro Ala Ala Val Cys

 Met Arg Ile Trp Ser Arg Ala Val Gly Asp Gly Pro Ala Ala Val Cys

 1
 5

 Cys Pro Leu Arg Ser Trp Cys Leu Leu Leu Trp Ala Leu Asp Ser Leu 20

 Asp Pro Ala Ala Val Thr Thr His Ala Ser Ala Met Leu Ser Gly Val 35

 Phe Thr Pro Pro Pro Phe Val Ser Ala Leu Pro Val Gln Trp Met Gln Met 50

 Fro Val Leu Ser Phe Leu Ser Leu Thr Gly Ser Ser Val Tyr Val His 65

 Met Ala Leu Leu Ser Gly His Gln Gly Ser Asp Thr Cys Ser Gly Leu 85

<210> 1479 <211> 113 <212> PRT <213> Homo sapiens

<400> 1479 Met Leu Ser Ile Ser Tyr Phe Ser Asn Ser Leu Met Leu Arg Leu Val 10 5 Pro Leu Ala Ala Tyr Val Leu Ser Tyr Leu Ile Cys Ser Val Leu Leu 25 20 His Ile Asn Gln Thr Thr Val Thr Thr Tyr Arg Gly Arg Lys Gln Arg 40 45 Lys Lys Ile Gln Phe Ala Thr Gly Asn His Gln Ser Ala Gln Ser Tyr 60 55 Ser Glu Leu Leu Ser Leu Ser Leu Ser Phe Ser Ser Leu Leu Ser Pro 75 70 Val Phe Ser Leu Pro Ser Trp Ser Leu Pro Ser Leu Pro Pro Phe Phe 90 85 Ser His Ser Pro His Gln Lys Gly Ile Met Met Val Pro Arg Ser Val 110 112 105

<210> 1480 <211> 91 <212> PRT <213> Homo sapiens

<210> 1481 <211> 54 <212> PRT <213> Homo sapiens

<210> 1482 <211> 56 <212> PRT <213> Homo sapiens

<210> 1483 <211> 202 <212> PRT

<213> Homo sapiens

<400> 1483 Met Leu Leu Leu Gly Leu Cys Leu Gly Leu Ser Leu Cys Val Gly 5 10 Ser Gln Glu Glu Ala Gln Ser Trp Gly His Ser Ser Glu Gln Asp Gly 25 Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu Lys Thr Lys 40 Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile Ile Ser Arg Tyr 60 55 Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn Arg Ala Ser Glu Asp 70 75 Gln Asp Ile Glu Phe Gln Met Gln Ile Pro Ala Ala Ala Phe Ile Thr 90 Asn Phe Thr Met Leu Ile Gly Asp Lys Val Tyr Gln Gly Glu Ile Thr 105 Glu Arg Glu Lys Lys Ser Gly Asp Arg Val Lys Glu Lys Arg Asn Lys 120 125 Thr Thr Glu Glu Asn Gly Glu Lys Gly Thr Glu Ile Phe Arg Ala Ser 135 140 Ala Val Ile Pro Ser Lys Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu 150 155 Glu Leu Leu Gln Arg Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val 170 165 Arg Pro Gln Gln Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu 180 185 Glu Ser Ala Gly Ile Ala Ser Leu Glu Val

<210> 1484 <211> 477 <212> PRT <213> Homo sapiens

<400> 1484 Met Pro Gln Leu Ser Leu Ser Trp Leu Gly Leu Gly Gln Val Ala Ala 5 1.0 Phe Pro Trp Leu Leu Leu Leu Ala Gly Ala Ser Arg Leu Leu Ala 25 Gly Phe Leu Ala Trp Thr Tyr Ala Phe Tyr Asp Asn Cys Arg Arg Leu Gln Tyr Phe Pro Gln Pro Pro Lys Gln Lys Trp Phe Trp Gly Gln Pro Gly Pro Pro Ala Ile Ala Pro Lys Asp Asp Leu Ser Ile Arg Phe Leu 70 Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu Ser Gly Gly Asp Lys Trp 90 Ser Arg His Arg Arg Met Leu Thr Pro Ala Phe His Phe Asn Ile Leu 105 100 Lys Ser Tyr Ile Thr Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp 115 120 125 Lys Trp Gln His Leu Ala Ser Glu Gly Ser Ser Cys Leu Asp Met Phe 135 140 Glu His Ile Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe 155 150 Ser Phe Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr 170 Ile Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu 185 Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg Phe 200 His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val Ile Arg 220 215 Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp Phe Phe Lys 230 235 Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp Val Leu Leu Leu 245 250 Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp Glu Asp Ile Arg Ala 265 260 Glu Ala Asp Thr Phe Met Phe Gly Gly His Asp Thr Thr Ala Ser Gly 280 Leu Ser Trp Val Leu Tyr Asn Leu Ala Arg His Pro Glu Tyr Gln Glu 295 300 Arg Cys Arg Gln Glu Val Gln Glu Leu Leu Lys Asp Arg Asp Pro Lys 310 315 Glu Ile Glu Trp Asp Asp Leu Ala Gln Leu Pro Phe Leu Thr Met Cys 325 330 Val Lys Glu Ser Leu Arg Leu His Pro Pro Ala Pro Phe Ile Ser Arg 345 340 Cys Cys Thr Gln Asp Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys 360 Gly Ile Thr Cys Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr 380 Val Trp Pro Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu

<210> 1485 <211> 67 <212> PRT <213> Homo sapiens

<210> 1486 <211> 93 <212> PRT <213> Homo sapiens

<400> 1486 Met Gly Ser Ser Val Leu Ser Ile Trp Ile Leu Ser Pro Ser Ile Tyr 10 5 Pro Ile Leu Ser Pro Leu Ala Met Pro Cys Leu Ser Arg Thr Asp Leu 25 20 Ile Arg Val Arg Arg Ile Gln Gly Ala Trp Pro Ser Glu Gly Thr Ala 45 3.5 40 Ser Ser Ile Arg Gly Trp Val Leu Thr Lys Leu Arg Met Ser Ser Gly 60 Lys Ala Leu Glu Ala Leu Tyr Cys Ile Pro Gly Ala Ala Gln His Pro 70 Gly Leu Gly Val Thr Arg Val Trp Ser Gly Arg Thr * 85 90

<210> 1487 <211> 88 <212> PRT

<213> Homo sapiens

<210> 1488 <211> 268 <212> PRT <213> Homo sapiens

<400> 1488 Met Gly Ser Ala Cys Ile Lys Val Thr Lys Tyr Phe Leu Phe Leu Phe 10 Asn Leu Ile Phe Phe Ile Leu Gly Ala Val Ile Leu Gly Phe Gly Val 25 Trp Ile Leu Ala Asp Lys Ser Ser Phe Ile Ser Val Leu Gln Thr Ser Ser Ser Ser Leu Arg Met Gly Ala Tyr Val Phe Ile Gly Val Gly Ala 55 60 Val Thr Met Leu Met Gly Phe Leu Gly Cys Ile Gly Ala Val Asn Glu 70 75 Val Arg Cys Leu Leu Gly Leu Tyr Phe Ala Phe Leu Leu Leu Ile Leu 90 Ile Ala Gln Val Thr Ala Gly Ala Leu Phe Tyr Phe Asn Met Gly Lys 105 Leu Lys Gln Glu Met Gly Gly Ile Val Thr Glu Leu Ile Arg Asp Tyr 115 120 Asn Ser Ser Arg Glu Asp Ser Leu Gln Asp Ala Trp Asp Tyr Val Gln 135 140 Ala Gln Val Lys Cys Cys Gly Trp Val Ser Phe Tyr Asn Trp Thr Asp 150 155 Asn Ala Glu Leu Met Asn Arg Pro Glu Val Thr Tyr Pro Cys Ser Cys 170 Glu Val Lys Gly Glu Glu Asp Asn Ser Leu Ser Val Arg Lys Gly Phe 180 185 Cys Glu Ala Pro Gly Asn Arg Thr Gln Ser Gly Asn His Pro Glu Asp 200 Trp Pro Val Tyr Gln Glu Gly Cys Met Glu Lys Val Gln Ala Trp Leu 215 220 Gln Glu Asn Leu Gly Ile Ile Leu Gly Val Gly Val Gly Val Ala Ile 230 235 Ile Glu Leu Leu Gly Met Val Leu Ser Ile Cys Leu Cys Arg His Val His Ser Glu Asp Tyr Ser Lys Val Pro Lys Tyr *

260 265 267

<210> 1489 <211> 832 <212> PRT <213> Homo sapiens

<400> 1489

Met Thr Leu Ala Leu Ala Tyr Leu Leu Ala Leu Pro Gln Val Leu Asp 10 Ala Asn Arg Cys Phe Glu Lys Gln Ser Pro Ser Ala Leu Ser Leu Gln 20 25 Leu Ala Ala Tyr Tyr Tyr Ser Leu Gln Ile Tyr Ala Arg Leu Ala Pro 35 40 Cys Phe Arg Asp Lys Cys His Pro Leu Tyr Arg Ala Asp Pro Lys Glu 55 - 60 Leu Ile Lys Met Val Thr Arg His Val Thr Arg His Glu His Glu Ala 70 75 Trp Pro Glu Asp Leu Ile Ser Leu Thr Lys Gln Leu His Cys Tyr Asn 90 Glu Arg Leu Leu Asp Phe Thr Gln Ala Gln Ile Leu Gln Gly Leu Arg 100 105 Lys Gly Val Asp Val Gln Arg Phe Thr Ala Asp Asp Gln Tyr Lys Arg 120 125 Glu Thr Ile Leu Gly Leu Ala Glu Thr Leu Glu Glu Ser Val Tyr Ser 135 140 Ile Ala Ile Ser Leu Ala Gln Arg Tyr Ser Val Ser Arg Trp Glu Val 150 155 Phe Met Thr His Leu Glu Phe Leu Phe Thr Asp Ser Gly Leu Ser Thr 165 170 Leu Glu Ile Glu Asn Arg Ala Gln Asp Leu His Leu Phe Glu Thr Leu 180 185 Lys Thr Asp Pro Glu Ala Phe His Gln His Met Val Lys Tyr Ile Tyr 200 205 Pro Thr Ile Gly Gly Phe Asp His Glu Arg Leu Gln Tyr Tyr Phe Thr 215 Leu Leu Glu Asn Cys Gly Cys Ala Asp Leu Gly Asn Cys Ala Ile Lys 230 235 Pro Glu Thr His Ile Arg Leu Leu Lys Lys Phe Lys Val Val Ala Ser 245 250 255 Gly Leu Asn Tyr Lys Lys Leu Thr Asp Glu Asn Met Ser Pro Leu Glu 260 265 Ala Leu Glu Pro Val Leu Ser Ser Gln Asn Ile Leu Ser Ile Ser Lys 280 Leu Val Pro Lys Ile Pro Glu Lys Asp Gly Gln Met Leu Ser Pro Ser 295 300 Ser Leu Tyr Thr Ile Trp Leu Gln Lys Leu Phe Trp Thr Gly Asp Pro 310 315 His Leu Ile Lys Gln Val Pro Gly Ser Ser Pro Glu Trp Leu His Ala 330 325 Tyr Asp Val Cys Met Lys Tyr Phe Asp Arg Leu His Pro Gly Asp Leu 345 Ile Thr Val Val Asp Ala Val Thr Phe Ser Pro Lys Ala Val Thr Lys 360 Leu Ser Val Glu Ala Arg Lys Glu Met Thr Arg Lys Ala Ile Lys Thr 375 380

Val 385	ГЛЗ	His	Phe	Ile	Glu 390	Lys	Pro	Arg	Lys	Arg 395		Ser	Glu	Asp	Glu 400
Ala	Gln	Glu	Ala	Lys 405		Ser	Lys	Val	Thr 410	Tyr		Asp	Thr	Leu 415	Asn
His	Leu	Glu	Lys 420	Ser	Leu	Ala	His	Leu 425			Leu	Ser	His	Ser	
Ile	Leu	Ser 435		Lys	Asn	Ser	Glu 440	Gln	Glu	Thr	Leu	Gln 445	. Lys		Ser
His	Leu 450		Asp	Leu	Ser	Arg			Lys	Glu	Lys 460	Leu		Asp	Glu
Ala 465		Ala	Ile	Cys	Leu 470		Gly	Gln	Pro	Leu 475			Ile	Gln	Gln 480
Leu	Leu	Glu	Val	Ala 485	Val	Gly	Pro	Leu	Asp 490		Ser	Pro	Lys	Asp 495	
Val	Gln	Ser	Ala 500	Ile	Met	Lys	Ile	Ile 505	Ser	Ala	Leu	Ser	Gly 510	Gly	Ser
Ala	Asp	Leu 515	Gly	Gly	Pro	Arg	Asp 520		Leu	Lys	Val	Leu 525	Glu	Gly	Val
Val	Ala 530	Ala	Val	His	Ala	Ser 535	Val	Asp	Lys	Gly	Glu 540	Glu	Leu	Val	Ser
545				Leu	550					555					560
		•		Pro 565					570				_	575	
			580	Glu				585					590		
		595		Lys			600					605			•
	610			Glu		615			_		620				
625				His	630					635					640
				Pro 645					650					655	
			660	Ala				665					670		
		675		Gly			680		_		_	685			-
	690			Met		695					700				
705				Gln	710					715		-			720
				Glu 725					730					735	
			740	Val				745					750		
		755		Ala			760					765			
	770			Val		775					780				
785				Glu	790					795			_		800
				Ser 805					810			•		815	
FILE	wrd	THE	820	Ser	rnr	нτα	∟eu	Arg 825	АТА	ATA	GTD	HIS	830		*

<210> 1490 <211> 55 <212> PRT <213> Homo sapiens

<400> 1490

<210> 1491 <211> 134 <212> PRT <213> Homo sapiens

<400> 1491

Met Thr Thr Phe Pro Pro Arg Lys Met Val Ala Gln Phe Leu Leu 10 Val Ala Gly Asn Val Ala Asn Ile Thr Thr Val Ser Leu Trp Glu Glu 20 25 30 -Phe Ser Ser Ser Asp Leu Ala Asp Leu Arg Phe Leu Asp Met Ser Gln 40 Asn Gln Phe Gln Tyr Leu Pro Asp Gly Phe Leu Arg Lys Met Pro Ser 55 Leu Ser His Leu Asn Leu His Gln Asn Cys Leu Met Thr Leu His Ile 70 75 Arg Glu His Glu Pro Pro Gly Ala Leu Thr Glu Leu Asp Leu Ser His 85 90 Asn Gln Leu Ser Glu Leu His Leu Ala Pro Gly Leu Ala Ser Cys Leu 100 105 Gly Ser Leu Arg Leu Phe Asn Leu Ser Ser Asn Gln Leu Leu Gly Val 115 120 Pro Pro Gly Pro Leu Tyr 130 134

<210> 1492 <211> 71 <212> PRT <213> Homo sapiens

<400> 1492

 Met
 Arg
 Ser
 Glu
 Trp
 Phe
 Tyr
 Lys
 Trp
 Phe
 Phe
 Pro
 Phe
 Ala
 Leu

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 20
 15

 20
 25
 25
 20
 30

 Met
 Cys
 His
 Glu
 Cys
 Lys
 Phe
 Pro
 Glu
 Ala
 Ser
 Pro
 Ala
 Thr
 Met
 Asn

 35
 40
 45
 45
 Asn
 Asn

Cys Glu Ser Ile Lys Pro Leu Phe Leu Ile Asn Tyr Pro Val Ser Asn
50 55 60
Lys Ser Leu Leu Ala Thr *
65 70

<210> 1493 <211> 78 <212> PRT <213> Homo sapiens

<400> 1493 Met Trp Ile Tyr Phe Trp Thr Leu Asn Ser Val Pro Val Ile Tyr Met 5 10 Ser Thr Leu Met Ser Ile Pro His Tyr Phe Asp Tyr Cys Cys Phe Ile 20 25 Val Ser Asp Ile Met Leu Pro Glu Ile Thr Phe Ser Thr Phe Ile Leu 40 35 Leu Leu Met Val Ala Leu Ala Ile Arg Gly Pro Leu His Phe Arg Arg 55 60 His Phe Arg Ile Asn Leu Ser Ile Ala Thr Lys Asn Ala * 75 77 70

<210> 1494 <211> 121 <212> PRT <213> Homo sapiens

<400> 1494 Met Ala Gly Leu Asn Cys Gly Val Ser Ile Ala Leu Leu Gly Val Leu 5 Leu Leu Gly Ala Ala Arg Leu Pro Arg Gly Ala Glu Ala Phe Glu Ile 20 25 Ala Leu Pro Arg Glu Ser Asn Ile Thr Val Leu Ile Lys Leu Gly Thr 40 Pro Thr Leu Leu Ala Lys Pro Cys Tyr Ile Val Ile Ser Lys Arg His 55 Ile Thr Met Leu Ser Ile Lys Ser Gly Glu Arg Ile Val Phe Thr Phe 70 75 Ser Cys Gln Ser Pro Glu Asn His Phe Val Ile Glu Ile Gln Lys Asn 90 Ile Asp Cys Met Ser Gly Pro Cys Pro Phe Gly Glu Val Gln Leu Gln 105 100 Pro Ser Thr Ser Leu Leu Pro Thr Leu 115 120 121

<210> 1495 <211> 91 <212> PRT <213> Homo sapiens

<400> 1495 Met Glu Asn Cys Val Gly Glu Arg Thr His Pro Leu Phe Val Val Tyr 5 10 Leu Ala Leu Gln Leu Val Val Leu Leu Trp Gly Leu Tyr Leu Ala Trp 25 Ser Gly Leu Arg Phe Phe Gln Pro Trp Gly Leu Trp Leu Arg Ser Ser 40 Gly Leu Leu Phe Ala Thr Phe Gln Leu Leu Ser Leu Phe Ser Leu Val 55 60 Ala Ser Leu Leu Leu Val Ser His Leu Tyr Leu Val Ala Ser Asn Thr 75 70 Thr Thr Trp Glu Phe Ile Ser Ser His His Val 85 90 91

<210> 1496 <211> 72 <212> PRT <213> Homo sapiens

<210> 1497 <211> 196 <212> PRT <213> Homo sapiens

<400> 1497 Met Ala Pro Arg Ala Leu Pro Gly Ser Ala Val Leu Ala Ala Ala Val 10 Phe Val Gly Gly Ala Val Ser Ser Pro Leu Val Ala Pro Asp Asn Gly 25 Ser Ser Arg Thr Leu His Ser Arg Thr Glu Thr Thr Pro Ser Pro Ser 40 Asn Asp Thr Gly Asn Gly His Pro Glu Tyr Ile Ala Tyr Ala Leu Val 55 Pro Val Phe Phe Ile Met Gly Leu Phe Gly Val Leu Ile Cys His Leu 70 75 Leu Lys Lys Lys Gly Tyr Arg Cys Thr Thr Glu Ala Glu Gln Asp Ile
85 90 85 Glu Glu Glu Lys Val Glu Lys Ile Glu Leu Asn Asp Ser Val Asn Glu 105 Asn Ser Asp Thr Val Gly Gln Ile Val His Tyr Ile Met Lys Asn Glu

<210> 1498 <211> 75 <212> PRT <213> Homo sapiens

<210> 1499 <211> 62 <212> PRT <213> Homo sapiens

(213) Homo Saptems

<210> 1500 <211> 138 <212> PRT <213> Homo sapiens

<400> 1500 ·
Met Pro Ile Trp Lys Pro Phe Met Ala Trp Met Ala Ala Trp Ala Leu

5 10 Ala Val Leu Ser Lys Leu Thr Lys Pro Ile His Leu Leu Trp Met Val 20 25 Ala Arg Ser Ile Asn Thr Leu Glu Glu Met Ile Leu Pro Lys Gly Thr 40 Asn Ile Cys Val Ser Ser Val Ser Pro Asn Ser Phe Ser Leu Leu Leu 55 60 Leu Gln Glu Gly Arg Arg Leu Glu Asp Ala Val Arg Asp Gly Arg Asp 70 75 Gly Arg Gly Gly Ala His Gly Cys Val Leu Leu Asp Ser Gly Glu Gly 90 Arg Met Gln Cys Leu Gly His Ser Arg Ala Leu Ser Trp Val Trp His 100 105 110 Lys Ala Ile Gly Ile Asp Glu Phe Pro Gly Gln Gly Ala His Leu Glu 115 120 Arg Ala Arg His Leu Pro Ser His Trp 135 137

<210> 1501 <211> 82 <212> PRT <213> Homo sapiens

<400> 1501 Met Ile Leu Phe Thr Arg Ala Trp Phe Glu Leu Val Thr Leu Val Gln 5 10 Phe Ile Ile Gly Ser Gln Met Leu Tyr Pro Tyr Leu His Ile Glu Glu 20 25 Phe Val Ile Arg Lys Leu Pro Val Leu Leu Tyr Arg Lys Ser Val Ile 40 45 Arg Tyr Gln Met Ala Ser Ser Pro Cys Leu Gln Met Phe Lys Gln Tyr 50 55 Cys Gly Trp Ser Arg Lys Ser Leu Arg His Ala Val Lys Cys Arg Ala 65 70 Arg * 81

<210> 1502 <211> 54 <212> PRT <213> Homo sapiens

<400> 1502

<210> 1503 <211> 62 <212> PRT <213> Homo sapiens

<210> 1504 <211> 46 <212> PRT <213> Homo sapiens

<210> 1505 <211> 48 <212> PRT <213> Homo sapiens

<210> 1506 <211> 190 <212> PRT <213> Homo sapiens

<400> 1506
Met Trp Leu Leu Gly Pro Leu Cys Leu Leu Leu Ser Ser Ala Ala Glu

Ser Gln Leu Leu Pro Gly Asn Asn Phe Thr Asn Glu Cys Asn Ile Pro 25 Gly Asn Phe Val Cys Ser Asn Gly Arg Cys Ile Pro Gly Ala Trp Gln 40 Cys Asp Gly Leu Pro Asp Cys Phe Asp Lys Ser Asp Glu Lys Glu Cys 55 Pro Lys Ala Lys Ser Lys Cys Gly Pro Thr Phe Phe Pro Cys Ala Ser 70 75 Gly Ile His Cys Ile Ile Gly Arg Phe Arg Cys Asn Gly Phe Glu Asp 90 Cys Pro Asp Gly Ser Asp Glu Glu Asn Cys Thr Ala Asn Pro Leu Leu 105 110 Cys Ser Thr Ala Arg Tyr His Cys Lys Asn Gly Leu Cys Ile Asp Lys 120 Ser Phe Ile Cys Asp Gly Gln Asn Asn Cys Gln Asp Asn Ser Asp Glu 135 140 Glu Ser Cys Glu Ser Ser Gln Val Phe Arg Pro Gln Val Ser Glu Trp 150 155 Gln Ala Arg Pro Arg Asp Leu Cys Ala Arg Trp Asn Ile Pro Phe Leu 165 170 Gly Arg Leu Glu Arg Pro Trp Ser Phe Thr Ser Ser Gln Gln · 185

<210> 1507 <211> 60

<213> Homo sapiens

<400> 1507

<212> PRT

<210> 1508 <211> 48 <212> PRT <213> Homo sapiens

<210> 1509 <211> 85 <212> PRT <213> Homo sapiens

<210> 1510 <211> 55 <212> PRT <213> Homo sapiens

<210> 1511 <211> 108 <212> PRT <213> Homo sapiens

<400> 1511

 Met
 Val
 Gly
 Phe
 Gly
 Ala
 Asn
 Arg
 Arg
 Ala
 Gly
 Arg
 Leu
 5
 Leu
 10
 Leu
 Ala
 Phe
 Asn
 Tyr

 Val
 Leu
 Leu
 Val
 Val
 Ile
 Val
 Leu
 Ala
 Phe
 Asn
 Tyr

 Trp
 Ser
 Ile
 Ser
 Arg
 His
 Val
 Leu
 Gln
 Glu
 Glu
 Val
 Ala
 Glu

 Leu
 Gln
 Gly
 Gln
 Val
 Gln
 Arg
 Thr
 Glu
 Val
 Ala
 Arg
 Ile
 Glu
 Arg
 Ile
 Glu
 Ile
 Ile

85 90 95 Gly Gln Arg Gly Pro Arg Glu Glu Met Arg Gly * 100 105 107

<210> 1512 <211> 119 <212> PRT <213> Homo sapiens

<400> 1512 Met Val Ala Arg Val Trp Ser Leu Met Arg Phe Leu Ile Lys Gly Ser 5 10 Val Ala Gly Gly Ala Val Tyr Leu Val Tyr Asp Gln Glu Leu Leu Gly 25 20 Pro Ser Asp Lys Ser Gln Ala Ala Leu Gln Lys Ala Gly Glu Val Val 40 35 Pro Pro Ala Met Tyr Gln Phe Ser Gln Tyr Val Cys Gln Gln Thr Gly - 55 60 Leu Gln Ile Pro Gln Leu Pro Ala Pro Pro Lys Ile Tyr Phe Pro Ile 75 70 Arg Asp Ser Trp Asn Ala Gly Ile Met Thr Val Met Ser Ala Leu Ser 85 90 Val Ala Pro Ser Lys Ala Arg Glu Tyr Ser Lys Glu Gly Trp Glu Tyr 100 105 Val Lys Ala Arg Thr Lys 115 118

<210> 1513 <211> 973 <212> PRT <213> Homo sapiens

<400> 1513 Met Val Lys Ser Lys Trp Gly Leu Ala Leu Ala Ala Val Val Thr Val 10 Leu Ser Ser Leu Leu Met Ser Val Gly Leu Cys Thr Leu Phe Gly Leu Thr Pro Thr Leu Asn Gly Gly Glu Ile Phe Pro Tyr Leu Val Val Val 40 Ile Gly Leu Glu Asn Val Leu Val Leu Thr Lys Ser Val Val Ser Thr 55 Pro Val Asp Leu Glu Val Lys Leu Arg Ile Ala Gln Gly Leu Ser Ser 75 70 Glu Ser Trp Ser Ile Met Lys Asn Met Ala Thr Glu Leu Gly Ile Ile 85 90 Leu Ile Gly Tyr Phe Thr Leu Val Pro Ala Ile Gln Glu Phe Cys Leu 100 105 Phe Ala Val Val Gly Leu Val Ser Asp Phe Phe Leu Gln Met Leu Phe 125 120 Phe Thr Thr Val Leu Ser Ile Asp Ile Arg Arg Met Glu Leu Ala Asp 140 130 135 Leu Asn Lys Arg Leu Pro Pro Glu Ala Cys Leu Pro Ser Ala Lys Pro 155

Val	Gly	Gln	Pro	Thr	Arg	Тут	Glu	Arg	Gln 170		Ala	Val	Arg	Pro 175	
Thr	Pro	His	Thr 180		Thr	Leu	Gln	Pro 185		Ser	Phe	Arg	Asn 190	Leu	Arg
Leu	Pro	Lys 195	Arg	Leu	Arg	Val	Val 200	Tyr	Phe	Leu	Ala	Arg 205	Thr	Arg	Leu
Ala	Gln 210	Arg	Leu	Ile	Met	Ala 215	Gly	Thr	Val	Val	Trp 220		Gly	Ile	Leu
225	-		Asp		230			_		235					240
			Ser	245					250					255	
		_	Met 260					265		_			270		
		275	Asp			-	280					285			_
	290		Glu		_	295					300				
305			Val		310					315					320
			Arg	325	-				330		_	-		335	
			Arg 340 Pro					345					350		
_	-	355	Trp	_			360					365			
	370		Lys			375					380				
385	_		_	_	390	_				395					400
	-	-	Val	405			-		410		_			415	
			Leu 420					425					430		
		435	Gly	_			440					445			
	450		Gly	_		455					460				
465	Arg	GTĀ	His	neu	470	Asp	TTE	GIU	Cys	475	MIG	DET	Map	GTĀ	480
Leu	Leu	Val	Ser	Cys 485	Cys	Leu	Ala	Gly	His 490	Val	Cys	Val	Trp	Asp 495	Ala
Gln	Thr	Gly	Asp 500	Cys	Leu	Thr	Arg	Ile 505	Pro	Arg	Pro	Gly	Arg 510	Gln	Arg
		515	Gly				520					525			
	530		qaA	-		535					540				
Pro 545	Pro	Leu	Arg	His	Arg 550	Pro	Arg	Gly	Pro	Pro 555	Pro	Pro	Ser	Leu	Phe 560
	Asp	Gln	Pro	Asp 565		Thr	Cys	Leu	Ile 570		Thr	Asn	Phe	Ser 575	
Gln	Pro	Arg	Ser 580		Gln	Pro	Thr	Gln 585		Glu	Pro	Arg	His 590		Ala
Val	Cys	Gly 595	Arg	Ser	Arg	Asp	Ser 600		Gly	Tyr	Asp	Phe 605		Суз	Leu
Val	Gln 610	Arg	Val	Tyr	Gln	Glu 615	Glu	Gly	Leu	Ala	Ala 620	Val	Сув	Thr	Pro
Ala	Leu	Arg	Pro	Pro	Ser	Pro	Gly	Pro	Val	Leu	Ser	Gln	Ala	Pro	Glu

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630
                                 635
Asp Glu Gly Gly Ser Pro Glu Lys Gly Ser Pro Ser Leu Ala Trp Ala
             645
                       650
Pro Ser Ala Glu Gly Ser Ile Trp Ser Leu Glu Leu Gln Gly Asn Leu
          660
                           665
Ile Val Val Gly Arg Ser Ser Gly Arg Leu Glu Val Trp Asp Ala Ile
                       680
Glu Gly Val Leu Cys Cys Ser Ser Glu Glu Val Ser Ser Gly Ile Thr
                   695
Ala Leu Val Phe Leu Asp Lys Arg Ile Val Ala Ala Arg Leu Asn Gly
      710
                                  715
Ser Leu Asp Phe Phe Ser Leu Glu Thr His Thr Ala Leu Ser Pro Leu
             725
                            730
Gln Phe Arg Gly Thr Pro Gly Arg Gly Ser Ser Pro Ala Ser Pro Val
                          745
Tyr Ser Ser Ser Asp Thr Val Ala Cys His Leu Thr His Thr Val Pro
                       760
Cys Ala His Gln Lys Pro Ile Thr Ala Leu Lys Ala Ala Ala Gly Arq
  770 775
                            780
Leu Val Thr Gly Ser Gln Asp His Thr Leu Arg Val Phe Arg Leu Glu
                       795
       790
Asp Ser Cys Cys Leu Phe Thr Leu Gln Gly His Ser Gly Ala Ile Thr
             805
                              810
Thr Val Tyr Ile Asp Gln Thr Met Val Leu Ala Ser Gly Gly Gln Asp
          820
                           825
Gly Ala Ile Cys Leu Trp Asp Val Leu Thr Gly Ser Arg Val Ser His
                             845
                       840
Val Phe Ala His Arg Gly Asp Val Thr Ser Leu Thr Cys Thr Thr Ser
                   855
                                    860
Cys Val Ile Ser Ser Gly Leu Asp Asp Leu Ile Ser Ile Trp Asp Arg
                870
                                 875 ·
Ser Thr Gly Ile Lys Phe Tyr Ser Ile Gln Gln Asp Leu Gly Cys Gly
             885
                              890
Ala Ser Leu Gly Val Ile Ser Asp Asn Leu Leu Val Thr Gly Gly Gln
         900
                          905
                                910
Gly Cys Val Ser Phe Trp Asp Leu Asn Tyr Gly Asp Leu Leu Gln Thr
                       920
Val Tyr Leu Gly Lys Asn Ser Glu Ala Gln Pro Ala Arg Gln Ile Leu
                   935
                                     940
Val Leu Asp Asn Ala Ala Ile Val Cys Asn Phe Gly Ser Glu Leu Ser
       950
                                 955
Leu Val Tyr Val Pro Ser Val Leu Glu Lys Leu Asp *
            965
                             970 972
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<210> 1514 <211> 77 <212> PRT <213> Homo sapiens

Asn Leu Ile Ile Asp Ser Ser Leu Lys Ile Leu Ser Gln Glu Pro Ser
50 55 60
Asn Leu Trp Gln Arg Ile Pro Lys Met Met Thr Thr *
65 70 75 76

<210> 1515 <211> 148 <212> PRT <213> Homo sapiens

<400> 1515 Met Leu Gly Ser Arg Leu Met Thr Leu Thr Val Cys Ala Gly Ala Leu Ala Arg Gly Arg Gly Thr Gly Thr Cys Glu Thr Arg Gln Glu Gly Lys Gly Gln Asn His Ser Thr Leu Ala Trp Pro His Glu Glu Pro Gly Ala Ser Thr Gly Arg Asp Gly Gly Lys Leu Pro Arg Gly Gln Cys Leu Leu - 55 Glu Lys Gly Pro Gly Gly Ala Gly Asp Lys Val Ser Lys Ile Phe Pro 70 Ser Cys Ala Leu Ala Leu Leu Leu Ser Leu Ala Asn Pro Gly Pro Arg 90 85 Gly Pro Arg Glu Phe His Leu Cys Trp Gly Trp Leu Asp Arg Gly Val 105 Thr Gln Glu Ala Val His Val Gly Glu Lys Arg Gly Gly Leu Gly Ser 120 125 Gly Arg Lys Gly Gly Trp Trp Pro Gly Trp Asp Pro Gly Cys Arg Asp 130 135 Val Ile Thr * 145 147

<210> 1516 <211> 274 <212> PRT <213> Homo sapiens

<400> 1516 Arg Glv Ser 0

 Met Arg Gly Ser Gln Glu Val Leu Leu Met Trp Leu Leu Val Leu Ala

 1
 5
 10
 10
 10
 15
 15

 Val Gly Gly Thr Glu His Ala Tyr Arg Pro Gly Arg Arg Val Cys Ala
 20
 25
 25
 25
 30
 30
 70
 70

 Val Arg Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val
 45
 45
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115 120 Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg 135 140 Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp 150 155 Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys 165 170 Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Val 185 Asp Ser Ala Met Lys Glu Glu Val Gln Arg Leu Gln Ser Arg Val Asp 200 Leu Leu Glu Glu Lys Leu Gln Leu Val Leu Ala Pro Leu His Ser Leu 215 220 Ala Ser Gln Ala Leu Glu His Gly Leu Pro Asp Pro Gly Ser Leu Leu 230 235 Val His Ser Phe Gln Gln Leu Gly Arg Ile Asp Ser Leu Ser Glu Gln 245 250 Ile Ser Phe Leu Glu Glu Glu Leu Gly Ser Cys Ser Cys Lys Lys Asp Ser * 273

<210> 1517 <211> 246 <212> PRT <213> Homo sapiens

<400> 1517

Met Thr Leu Phe Pro Val Leu Leu Phe Leu Val Ala Gly Leu Leu Pro 10 Ser Phe Pro Ala Asn Glu Asp Lys Asp Pro Ala Phe Thr Ala Leu Leu 25 Thr Thr Gln Thr Gln Val Gln Arg Glu Ile Val Asn Lys His Asn Glu 40 Leu Arg Arg Ala Val Ser Pro Pro Ala Arg Asn Met Leu Lys Met Glu 55 60 Trp Asn Lys Glu Ala Ala Ala Asn Ala Gln Lys Trp Ala Asn Gln Cys Asn Tyr Arg His Ser Asn Pro Lys Asp Arg Met Thr Ser Leu Lys Cys 90 Gly Glu Asn Leu Tyr Met Ser Ser Ala Ser Ser Ser Trp Ser Gln Ala 100 105 110 Ile Gln Ser Trp Phe Asp Glu Tyr Asn Asp Phe Asp Phe Gly Val Gly 120 125 Pro Lys Thr Pro Asn Ala Val Val Gly His Tyr Thr Gln Val Val Trp 135 Tyr Ser Ser Tyr Leu Val Gly Cys Gly Asn Ala Tyr Cys Pro Asn Gln 155 Lys Val Leu Lys Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn 165 170 Trp Ala Asn Arg Leu Tyr Val Pro Tyr Glu Gln Gly Ala Pro Cys Ala 185 Ser Cys Pro Asp Asn Cys Asp Asp Gly Leu Cys Thr Asn Gly Cys Lys 200 Tyr Glu Asp Leu Tyr Ser Asn Cys Lys Ser Leu Lys Leu Thr Leu Thr

Cys Lys His Gln Leu Val Arg Asp Ser Cys Lys Ala Ser Cys Asn Cys 225 230 235 240 Ser Asn Ser Ile Tyr * 245

<210> 1518 <211> 122 <212> PRT <213> Homo sapiens

<400> 1518 Met Arg Asn Arg Arg Thr Glu Arg Thr Cys Thr Pro Pro Leu Ala Ser 10 Pro Tyr Asn Leu Val Pro His Leu Gln Asn Leu Leu Ala Val Leu Leu 20 25 Met Ile Leu Val Leu Thr Pro Met Val Leu Asn Pro His Lys Leu Tyr 40 Gln Met Met Thr Gln Asn Ile Leu Leu Gln Lys Pro Gln Lys Asn Phe 55 Ile Trp Thr Ala Leu Lys Gly Asn Leu Ser Tyr Pro Arg Asn Leu Leu 70 75 Leu Gln Ser His Leu Ser Leu Leu His Ser Leu Leu Leu Glu Leu 85 90 Asn Gln Arg Val Cys Leu Leu Pro Arg Ser Leu Ile Asp Pro Gly Lys 105 Arg Leu Lys Lys Lys Pro Met Glu Thr Phe 115 120

<210> 1519 <211> 249 <212> PRT

<213> Homo sapiens

<400> 1519 Met Gly Leu Ser Ile Phe Leu Leu Cys Val Leu Gly Leu Ser Gln 10 Ala Ala Thr Pro Lys Ile Phe Asn Gly Thr Glu Cys Gly Arg Asn Ser 20 25 Gln Pro Trp Gln Val Gly Leu Phe Glu Gly Thr Ser Leu Arg Cys Gly 35 40 Gly Val. Leu Ile Asp His Arg Trp Val Leu Thr Ala Ala His Cys Ser -55 Gly Ser Arg Tyr Trp Val Arg Leu Gly Glu His Ser Leu Ser Gln Leu 75 Asp Trp Thr Glu Gln Ile Arg His Ser Gly Phe Ser Val Thr His Pro 90 85 Gly Tyr Leu Gly Ala Ser Thr Ser His Glu His Asp Leu Arg Leu Leu 100 105 Arg Leu Arg Leu Pro Val Arg Val Thr Ser Ser Val Gln Pro Leu Pro 120 115 125 Leu Pro Asn Asp Cys Ala Thr Ala Gly Thr Glu Cys His Val Ser Gly 135 140 Trp Gly Ile Thr Asn His Pro Arg Asn Pro Phe Pro Asp Leu Leu Gln

150 155 Cys Leu Asn Leu Ser Ile Val Ser His Ala Thr Cys His Gly Val Tyr 165 170 Pro Gly Arg Ile Thr Ser Asn Met Val Cys Ala Gly Gly Val Pro Gly 180 185 Gln Asp Ala Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Gly Gly 200 Val Leu Gln Gly Leu Val Ser Trp Gly Ser Val Gly Pro Cys Gly Gln 215 220 Asp Gly Ile Pro Gly Val Tyr Thr Tyr Ile Cys Lys Tyr Val Asp Trp 230 235 Ile Arg Met Ile Met Arg Asn Asn * 245

<210> 1520 <211> 292 <212> PRT <213> Homo sapiens

<400> 1520

Met Leu Val Leu Gln Ile Leu Leu Cys Ile Arg Glu Phe Ile Leu Glu 5 10 Arg Ser Leu Ile Asn Val Lys Asn Val Ala Lys Ser Leu Ala Val Val 25 Leu Ala Leu Leu Asn Ile Gly Lys Phe Ile Leu Glu Lys Ile Phe Thr 40 Asn Ala Lys Tyr Val Leu Asn Leu Leu Val Ser Gln Ile Leu Leu 55 60 Cys Met Arg Glu Phe Ile Leu Glu Arg Asn Pro Ile Asn Val Lys Asn 70 75 Val Ala Lys Pro Phe Leu Ile Val His Thr Leu Phe Asp Ile Ile Glu 85 90 Phe Ile Leu Glu Lys Asn His Thr Asn Val Lys His Val Ala Asn Leu 100 105 Leu Val Thr Pro Gln Val Leu Leu Cys Ile Gly Glu Leu Ile Leu Glu 120 Arg Asn Pro Ile His Val Lys Asn Val Ala Lys Pro Leu Val Ile Val 135 140 Gln Met Leu Phe Ser Ile Gly Glu Phe Ile Leu Ala Arg Asp Pro Thr 150 155 Asn Val Lys Asn Val Ala Lys Pro Ser Thr Ile Gly His Thr Ser Leu 165 170 His Ile Lys Glu Val Ile Leu Glu Arg Asp Pro Thr Asn Val Lys Asn 185 Val Ala Lys Pro Ser Thr Leu Gly His Thr Ser Leu His Ile Gly Glu 200 Asp Ile Leu Glu Arg Asp Pro Thr Asn Val Met Asn Val Val Lys Pro 210 215 Ser Ala Ile Gly His Thr Ser Leu His Ile Gly Glu Val Ile Val Glu 230 235 Arg Asp Pro Thr Asn Val Lys Asn Val Ala Lys Pro Leu Thr Leu Gly 245 250 His Thr Ser Leu His Ile Arg Glu Val Ile Leu Glu Lys Asn Phe Lys 265 Asn Val Lys His Gly Ala Asp Phe Leu Leu Val Thr His Val Leu Leu

Cys Ile Arg * 290 291

<210> 1521 <211> 129 <212> PRT <213> Homo sapiens

<400> 1521 Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly 10 Val Cys Ala Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys 20 25 Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe 40 Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser 70 75 Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser 85 90 Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met 105 Tyr Tyr Cys Ala Arg His Thr Val Arg Glu Thr Ser Pro Glu Pro Val

<210> 1522 <211> 66 <212> PRT <213> Homo sapiens

<210> 1523 <211> 131 <212> PRT <213> Homo sapiens

<400> 1523 Met Ile Leu Leu Ala Phe Leu Val Cys Trp Gly Pro Leu Phe Gly Leu 5 10 Leu Leu Ala Asp Val Phe Gly Ser Asn Leu Trp Ala Gln Glu Tyr Leu 20 25 Arg Gly Met Asp Trp Ile Leu Ala Leu Ala Val Leu Asn Ser Ala Val 35 40 Asn Pro Ile Ile Tyr Ser Phe Arg Ser Arg Glu Val Cys Arg Ala Val 55 60 Leu Ser Phe Leu Cys Cys Gly Cys Leu Arg Leu Gly Met Arg Gly Pro Gly Asp Cys Leu Ala Arg Ala Val Glu Ala His Ser Gly Ala Ser Thr 90 Thr Asp Ser Ser Leu Arg Pro Arg Asp Ser Phe Arg Gly Ser Arg Ser 100 105 110 Leu Ser Phe Arg Met Arg Glu Pro Leu Ser Ser Ile Ser Ser Val Arg 120 Ser Ile * 130

<210> 1524 <211> 52 <212> PRT <213> Homo sapiens

<210> 1525 <211> 246 <212> PRT <213> Homo sapiens

<400> 1525

 Met
 Thr
 Leu
 Phe
 Pro
 Val
 Leu
 Leu
 Phe
 Leu
 Val
 Ala
 Glu
 Pro
 Leu
 Pro
 Ala
 Ala
 Leu
 Leu</th

Gly Glu Asn Leu Tyr Met Ser Ser Ala Ser Ser Ser Trp Ser Gln Ala 105 Ile Gln Ser Trp Phe Asp Glu Tyr Asn Asp Phe Asp Phe Gly Val Gly 120 Pro Lys Thr Pro Asn Ala Val Val Gly His Tyr Thr Gln Val Val Trp 135 Tyr Ser Ser Tyr Leu Val Gly Cys Gly Asn Ala Tyr Cys Pro Asn Gln 150 155 Lys Val Leu Lys Tyr Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn 170 165 Trp Ala Asn Arg Leu Tyr Val Pro Tyr Glu Gln Gly Ala Pro Cys Ala 180 185 Ser Cys Pro Asp Asn Cys Asp Asp Gly Leu Cys Thr Asn Gly Cys Lys 200 195 Tyr Glu Asp Leu Tyr Ser Asn Cys Lys Ser Leu Lys Leu Thr Leu Thr 215 Cys Lys His Gln Leu Val Arg Asp Ser Cys Lys Ala Ser Cys Asn Cys 230 235 Ser Asn Ser Ile Tyr * 245

<210> 1526 <211> 47 <212> PRT

<213> Homo sapiens

.<210> 1527 <211> 118 <212> PRT <213> Homo sapiens

100 105 Leu Ala Gln Val Arg * 115 117

<210> 1528 <211> 92 <212> PRT <213> Homo sapiens

<400> 1528 Met Lys Val Ser Ala Ala Ala Leu Ala Val Ile Leu Ile Ala Thr Ala 5 10 Leu Cys Ala Pro Ala Ser Ala Ser Pro Tyr Ser Ser Asp Thr Thr Pro 20 25 30 Cys Cys Phe Ala Tyr Ile Ala Arg Pro Leu Pro Arg Ala His Ile Lys 35 40 45 Glu Tyr Phe Tyr Thr Ser Gly Lys Cys Ser Asn Pro Ala Val Val Phe 50 55 60 Val Thr Arg Lys Asn Arg Gln Val Cys Ala Asn Pro Glu Lys Lys Trp 65 70 75 Val Arg Glu Tyr Ile Asn Ser Leu Glu Met Ser * . 85 90 91

<210> 1529 <211> 71 <212> PRT <213> Homo sapiens

<400> 1529 Met Tyr Cys Trp Trp Cys Trp Leu Cys Thr Ala Met Val Cys Ser Gly 10 Val Leu Cys Arg Pro Leu Trp Glu Pro Leu Ser Pro Arg Leu Ser Val 20 25 Phe Trp Ala Gly Arg Tyr Leu Gly Phe Trp Cys Met Gly Cys Cys Arg 40 . 45 Met Ala Met Tyr Cys Val Ser Ser Cys Ser Arg Phe Ser Gly Glu Ser 55 Gly Phe Arg Arg Ile Pro *

65 70

> <210> 1530 <211> 85 <212> PRT <213> Homo sapiens

<400> 1530 Met Val Leu Arg Val Cys Phe Leu Ile Phe Val Leu Tyr His Asn Leu 1 5 10 Gly Lys Tyr Ile Phe Ile Ile Tyr Val Tyr Arg Cys Lys Asp Arg Phe 25

<210> 1531 <211> 60 <212> PRT <213> Homo sapiens

<210> 1532 <211> 53 <212> PRT <213> Homo sapiens

<210> 1533 <211> 741 <212> PRT <213> Homo sapiens

		35					40					45			
Trp	Lys 50	Leu	Val	Ser	Glu	Met 55	Lys	Ala	Glu	Asn	Ile 60	_	Ser	Phe	Leu
Arg 65	Ser	Phe	Thr	Lys	Leu 70	Pro	His	Leu	Ala	Gly 75	Thr	Glu	Gln	Asn	Phe 80
			_	85					90		-		_	95	
			100		His			105					110		
		115			Ile		120		·			125			
	130			_	Leu	135				_	140	_			
Thr 145	Asn	Ile	Val	Pro	Pro 150	Tyr	Asn	Ala	Phe	Ser 155	Ala	Gln	Gly	Met	Pro 160
Glu	Gly	Asp	Leu	Val 165	Tyr	Val	Asn	Tyr	Ala 170		Thr	Glu	Asp	Phe 175	
			180		Met		•	185				_	190		
		195			Ile		200					205			
	210				Gly	215					220				
225					Gln 230					235					240
				245	Gly				250					255	_
			260	•	Tyr			265		_			270		-
		275	_		Gly		280	_				285			•
_	290	_			Ile	295		_	_		300	=			
Pro 305	Asp	Lys	Ser	Trp	Lys 310	Gly	Ala	Leu	Asn	Val 315	Ser	Tyr	Ser	Ile	Gly 320
	_			325	Ser	_			330	-		_		335	
			340		Ile			345	_				350		
_	_	355			Pro	_	360	-				365	_		_
_	370	_			Gly	375		-			380	_			
Leu 385	GIn	GIu	IIe	Ala	Arg 390	Ser	Phe	GIA	Lys	Leu 395	Met	Ser	Lys	Gly	Trp 400
				405	Ile				410		_			415	
			420	_	Thr			425					430		
		435			Ala	_	440			_		445			-
	450				Val	455					460				
Tyr 465	Lys	Leu	Thr	Lys	Glu 470	Ile	Pro	Ser	Pro	Asp 475	Asp	Gly	Phe	Glu	Ser 480
				485	Ser				490					495	
Lys	Asn	Leu	Pro 500	Arg	Ile	Asn	Lys	Leu 505	Gly	Ser	Gly	Ser	Asp 510	Phe	Glu

Ala Tyr Phe Gln Arg Leu Gly Ile Ala Ser Gly Arg Ala Arg Tyr Thr 520 Lys Asn Lys Lys Thr Asp Lys Tyr Ser Ser Tyr Pro Val Tyr His Thr 535 540 Ile Tyr Glu Thr Phe Glu Leu Val Glu Lys Phe Tyr Asp Pro Thr Phe 550 555 Lys Lys Gln Leu Ser Val Ala Gln Leu Arg Gly Ala Leu Val Tyr Glu 565 570 575 Leu Val Asp Ser Lys Ile Ile Pro Phe Asn Ile Gln Asp Tyr Ala Glu 580 585 590 Ala Leu Lys Asn Tyr Ala Ala Ser Ile Tyr Asn Leu Ser Lys Lys His 605 595 600 Asp Gln Gln Leu Thr Asp His Gly Val Ser Phe Asp Ser Leu Phe Ser 615 620 Ala Val Lys Asn Phe Ser Glu Ala Ala Ser Asp Phe His Lys Arg Leu 630 635 Ile Gln Val Asp Leu Asn Asn Pro Ile Ala Val Arg Met Met Asn Asp 645 · 650 Gln Leu Met Leu Leu Glu Arg Ala Phe Ile Asp Pro Leu Gly Leu Pro 660 665 670 Gly Lys Leu Phe Tyr Arg His Ile Ile Phe Ala Pro Ser Ser His Asn 680 Lys Tyr Ala Gly Glu Ser Phe Pro Gly Ile Tyr Asp Ala Ile Phe Asp 695 Ile Glu Asn Lys Ala Asn Ser Arg Leu Ala Trp Lys Glu Val Lys Lys 710 715 His Ile Ser Ile Ala Ala Phe Thr Ile Gln Ala Ala Gly Thr Leu 725 730 Lys Glu Val Leu * 740

> <210> 1534 <211> 50 <212> PRT

<213> Homo sapiens

<210> 1535 <211> 973 <212> PRT <213> Homo sapiens

<400> 1535
Met Val Lys Ser Lys Trp Gly Leu Ala Leu Ala Ala Val Val Thr Val

_ 1	_	_	_	- 5		_			10			_		15	
			20				Val	25			`		30		
Thr	Pro	Thr 35	Leu	Asn	Gly	Gly	Glu 40	Ile	Phe	Pro	Tyr	Leu 45		Val	Val
Ile	Gly 50	Leu	Glu	Asn	Val	Leu 55	Val	Leu	Thr	Lys	Ser 60	Val	Val	Ser	Thr
Pro 65	Val	Asp	Leu	Glu	Val 70	Lys	Leu	Arg	Ile	Ala 75		Gly	Leu	Ser	Ser 80
Glu	Ser	Trp	Ser	Ile 85	Met	Lys	Asn	Met	Ala 90	Thr	Glu	Leu	Gly	Ile 95	Ile
Leu	Ile	Gly	Tyr 100	Phe	Thr	Leu	Val	Pro 105		Ile	Gln	Glu	Phe 110	Сув	Leu
Phe	Ala	Val 115	Val	Gly	Leu	Val	Ser 120	Asp	Phe	Phe	Leu	Gln 125	Met	Leu	Phe
Phe	Thr 130	Thr	Val	Leu	Ser	Ile 135	Asp	Ile	Arg	Arg	Met 140	Glu	Leu	Ala	Asp
Leu 145	Asn	Lys	Arg	Leu	Pro 150	Pro	Glu	Ala	Сув	Leu 155		Ser	Ala	Lys	Pro 160
				165			Glu		170					175	
Thr	Pro	His	Thr 180	Ile	Thr	Leu	Gln	Pro 185		Ser	Phe	Arg	Asn 190	Leu	Arg
		195	_		_		Val 200	_				205			
	210					215	Gly				220				
225	_		_		230		Leu	_		235					240
				245			Glu		250					255	
			260				Ser	265					270		
		275					Leu 280					285			_
	290					295	Pro				300				
305					310		Pro			315					320
				325			Thr		330					335	
			340				Leu	345					350		
Arg	Leu	Asn 355	Pro	Arg	Glu	Ala	Leu 360	Glu	Gly	Arg	His	Pro 365	Gln	Asp	Gly
Arg	Ser 370	Ala	Trp	Pro	Pro	Pro 375	Gly	Pro	Ile	Pro	Ala 380	Gly	His	Trp	Glu
Ala 385	Gly	Pro	Lys	Gly	Pro 390	Gly	Gly	Val	Gln	Ala 395	His	Gly	Asp	Val	Thr 400
Leu	Tyr	Lys	Val	Ala 405	Ala	Leu	Gly	Leu	Ala 410	Thr	Gly	Ile	Val	Leu 415	Val
Leu	Leu	Leu	Leu 420	Cys	Leu	Tyr	Arg	Val 425	Leu	Cys	Pro	Arg	Asn 430	Tyr	Gly
Gln	Leu	Gly 435	Gly	Gly	Pro	Gly	Arg 440	Arg	Arg	Arg	Gly	Glu 445	Leu	Pro	Cys
Asp	Asp 450	Tyr	Gly	Tyr	Ala	Pro 455	Pro	Glu	Thr	Glu	Ile 460	Val	Pro	Leu	Val
Leu 465	Arg	Gly	His	Leu	Met 470	Asp	Ile	Glu	Сув	Leu 475	Ala	Ser	Asp	Gly	Met 480

Leu	Leu	Val	Ser	Cys 485	Cys	Leu	Ala	Gly	His 490	Val	Cys	Val	Trp	Asp 495	Ala
Gln	Thr	Gly	Asp 500		Leu	Thr	Arg	Ile 505		Arg	Pro	Gly	Arg 510		Arg
Arg	qaA	Ser 515	Gly	Val	Gly	Ser	Gly 520	-	Glu	Ala	Gln	Glu 525		Trp	Glu
Arg	Leu 530		Asp	Gly	Gly	Lys 535	Ala	Gly	Pro	Glu	Glu 540		Gly	Asp	Ser
Pro 545		Leu	Arg	His	Arg 550		Arg	Gly	Pro	Pro 555	Pro	Pro	Ser	Leu	Phe 560
Gly	qaÆ	Gln	Pro	Asp 565	Leu	Thr	Cys	Leu	Ile 570	Asp	Thr	Asn	Phe	Ser 575	Ala
Gln	Pro	Arg	Ser 580	Ser	Gln	Pro	Thr	Gln 585	Pro	Glu	Pro	Arg	His 590	Arg	Ala
Val	Сув	Gly 595	Arg	Ser	Arg	Двр	Ser 600	Pro	Gly	Tyr	Asp	Phe 605	Ser	Cys	Leu
.Val	Gln 610	Arg	Val	Tyr	Gln	Glu 615	Glu	Gly	Leu	Ala	Ala 620	Val	Cys	Thr	Pro
625			Pro		630					635					640
_		-	Gly	645			_	_	650					655	
			Glu 660	•			-	665					670		
		675	Gly				680					685			
	690		Leu 	_	-,	695		ŧ			700		-		
705			Phe		710					715					720
			Phe	725					730					735	
			Gly 740					745					750		
-		755	Ser	-			760	-				765			
	770		Gln	-		775				_	780			_	_
785			Gly		790	_				795					800
			Cys	805					810					815	
		_	Ile 820	-				825				_	830		_
		835	Cys				840					845			
	850		His	_		855					860	_			
865			Ser		870		_	_		875			_	_	880
			Ile	885					890					895	
			Gly 900					905					910		
		915	Ser				920					925			
	930		Gly	_		935					940				
val	ьeu	Asp	Asn	АТА	ATA	тте	val	cys	asn	rne	GTĀ	ser	GTU	ьeu	ser

945 950 955 960 Leu Val Tyr Val Pro Ser Val Leu Glu Lys Leu Asp * 965 970 972

<210> 1536 <211> 75 <212> PRT <213> Homo sapiens

<210> 1537 <211> 96 <212> PRT <213> Homo sapiens

<400> 1537 Met Asp Leu Gly Arg Val Phe Ile Thr Leu Ile Leu Asn Leu Leu Arg 5 10 Glu Thr Ile Phe Lys Arg Asp Gln Ser Pro Glu Pro Lys Val Pro Glu 25 Gln Ser Val Lys Glu Asp Arg Lys Leu Cys Glu Arg Pro Leu Ala Ser 40 Ser Pro Pro Arg Leu Tyr Glu Asp Asp Glu Thr Pro Gly Ala Leu Ser 55 60 Gly Leu Thr Asn Met Ala Val Ile Gln Ile Asp Gly His Met Ser Gly 70 75 Gln Met Val Lys His Leu Met Asn Ser Met Met Lys Leu Cys Val Met 85

<210> 1538 <211> 318 <212> PRT <213> Homo sapiens

Pro Ile Thr Val Thr Gly Ala Gln Val Leu Ser Lys Val Gly Gly Ser 20 25 Val Leu Leu Val Ala Ala Arg Pro Pro Gly Phe Gln Val Arg Glu Ala 40 Ile Trp Arg Ser Leu Trp Pro Ser Glu Glu Leu Leu Ala Thr Phe Phe 55 Arg Gly Ser Leu Glu Thr Leu Tyr His Ser Arg Phe Leu Gly Arg Ala 70 75 Gln Leu His Ser Asn Leu Ser Leu Glu Leu Gly Pro Leu Glu Ser Gly 85 90 -Asp Ser Gly Asn Phe Ser Val Leu Met Val Asp Thr Arg Gly Gln Pro 100 105 Trp Thr Gln Thr Leu Gln Leu Lys Val Tyr Asp Ala Val Pro Arg Pro 120 115 125 Val Val Gln Val Phe Ile Ala Val Glu Arg Asp Ala Gln Pro Ser Lys 135 Thr Cys Gln Val Phe Leu Ser Cys Trp Ala Pro Asn Ile Ser Glu Ile 150 155 Thr Tyr Ser Trp Arg Arg Glu Thr Thr Met Asp Phe Gly Met Glu Pro 170 165 His Ser Leu Phe Thr Asp Gly Gln Val Leu Ser Ile Ser Leu Gly Pro 185 Gly Asp Arg Asp Val Ala Tyr Ser Cys Ile Val Ser Asn Pro Val Ser 200 Trp Asp Leu Ala Thr Val Thr Pro Trp Asp Ser Cys His His Glu Ala 210 215 220 Ala Pro Gly Lys Ala Ser Tyr Lys Asp Val Leu Leu Val Val Val Pro 230 235 Val Ser Leu Leu Leu Met Leu Val Thr Leu Phe Ser Ala Trp His Trp 250 Cys Pro Cys Ser Gly Pro His Leu Arg Ser Lys Gln Leu Trp Met Arg 265 270 Trp Asp Leu Gln Leu Ser Leu His Lys Val Thr Leu Ser Asn Leu Ile 275 280 Ser Thr Val Val Cys Ser Val Val His Gln Gly Leu Val Glu Gln Ile 295 His Thr Ala Leu Ile Lys Phe Pro Ser Leu Met Lys Lys Lys 310

<210> 1539 <211> 157 <212> PRT <213> Homo sapiens

<400> 1539

 Met
 Ile
 Leu
 Gln
 Val
 Ser
 Gly
 Gly
 Pro
 Trp
 Thr
 Val
 Ala
 Leu
 Thr
 Ala

 Leu
 Leu
 Leu
 Leu
 Ile
 Ser
 Val
 Val
 Gln
 Ser
 Arg
 Ala
 Thr
 Pro

 Glu
 Asn
 Ser
 Val
 Tyr
 Gln
 Glu
 Cys
 Tyr
 Ala
 Phe
 Asn
 Gly

 Glu
 Asn
 Ser
 Val
 Val
 Asp
 Gly
 Leu
 Ile
 Tyr
 Asn
 Arg
 Glu
 Glu
 Tyr
 Val

 France
 Asp
 Ser
 Ala
 Val
 Asp
 Gly
 Leu
 Ile
 Tyr
 Asn
 Arg
 Glu
 Tyr
 Val
 Asp
 Asp
 Gly
 Ile
 Tyr
 Asp
 Asp
 Phe
 Asp
 Phe
 Asp
 Phe
 Asp
 Phe
 Asp
 Asp
 Phe
 Asp
 Phe

<210> 1540 <211> 135 <212> PRT <213> Homo sapiens

<400> 1540

Met Gly Ser Ser Phe Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly 10 Leu Ser Ala Gly Val Leu Leu Glu Gln Ser Arg Ala Glu Val Lys Lys 25 Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Ala Ser Gly Tyr Arg Phe 35 40 Thr Ser Ala Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu 60 50 . 55 Glu Trp Met Gly Thr Ile Tyr Pro Ala Asp Ser Glu Val Arg Tyr Ser 70 75 80 Pro Ser Leu Gln Gly Gln Val Thr Leu Ser Val Asp Glu Ser Ile Ser 85 90 95 Thr Ala Tyr Leu Gln Trp Asn Ser Leu Arg Ala Ser Asp Thr Ala Thr 100 105 110 Tyr Tyr Cys Ala Arg Gln Ile Ile Gly Ala Leu Pro Thr Asp Pro Phe 115 120 Asp Leu Leu Gly Gln Gly Thr

<210> 1541 <211> 72 <212> PRT <213> Homo sapiens

<210> 1542 <211> 369 <212> PRT <213> Homo sapiens

<400> 1542 Met Ala Pro Arg Thr Leu Val Leu Leu Ser Gly Ala Leu Ala Leu 10 Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr 40 Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr 70 75 Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg 90 85 Val Asp Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly 100 105 Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp 120 125 Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr 135 140 Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala 155 150 Ala Gln Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln 170 Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr 180 185 190 Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr 200 His Met Thr His His Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys 215 220 Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg 230 235 Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro 245 250 Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser 265 260 270 Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro 280 Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Pro Thr Ile Pro . 300 295 Ile Val Gly Ile Ile Ala Gly Leu Val Leu Phe Gly Ala Val Ile Thr 310 315 Gly Ala Val Val Ala Ala Val Met Trp Arg Arg Lys Ser Ser Asp Arg 325 330 Lys Gly Val Lys Asp Arg Lys Gly Gly Ser Tyr Ser Gln Ala Ala Ser 345 Ser Asp Ser Ala Gln Gly Ser Asp Val Ser Leu Thr Ala Cys Lys Val

<210> 1543 <211> 49 <212> PRT <213> Homo sapiens

<400> 1543

<210> 1544
<211> 121
<212> PRT

<213> Homo sapiens

<400> 1544 Met Lys Ile Phe Lys Cys Tyr Phe Lys His Thr Leu Gln Gln Lys Val 10 Phe Ile Leu Phe Leu Thr Leu Trp Leu Leu Ser Leu Leu Lys Leu Leu 25 30 Asn Val Arg Arg Leu Phe Pro Gln Lys Asp Ile Tyr Leu Val Glu Tyr 35 40 Ser Leu Ser Thr Ser Pro Phe Val Arg Asn Arg Tyr Thr His Val Lys 55 60 Asp Glu Val Arg Tyr Glu Val Asn Cys Ser Gly Ile Tyr Glu Gln Glu 70 Pro Leu Glu Ile Gly Lys Ser Leu Glu Ile Arg Arg Arg Asp Ile Ile 85 90 Asp Leu Glu Asp Asp Asp Val Val Ala Met Thr Ser Asp Cys Asp Ile 100 105 Tyr Gln Thr Leu Lys Gly Tyr Ala * 115

<210> 1545 <211> 70 <212> PRT <213> Homo sapiens

<400> 1545

 Met
 Phe
 Leu
 Lys
 Trp
 Pro
 Leu
 Trp
 Val
 Leu
 Gln
 Tyr
 Val
 Val
 Cys

 1
 5
 5
 10
 10
 15
 15

 Ser
 Leu
 Lys
 Asp
 Lys
 Phe
 Phe

Gln Pro Gly Gln Val * 65 69

<210> 1546 <211> 58 <212> PRT <213> Homo sapiens

<400> 1546

 Met
 Tyr
 Gly
 Met
 Leu
 Glu
 Trp
 Pro
 Ile
 Ser
 Met
 Tyr
 Phe
 Val
 Ala
 Phe

 Leu
 His
 Cys
 Phe
 Leu
 Cys
 Ser
 Gly
 Ala
 Leu
 Gly
 Asp
 Ser
 Phe
 Gln

 Ala
 Leu
 Pro
 Glu
 Leu
 Cys
 Ala
 Asn
 Cys
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 Arg
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<210> 1547 <211> 65 <212> PRT <213> Homo sapiens

<210> 1548 <211> 78 <212> PRT <213> Homo sapiens

65 70 75 77

<210> 1549 <211> 54 <212> PRT <213> Homo sapiens

<210> 1550 <211> 70 <212> PRT <213> Homo sapiens

<210> 1551 <211> 224 <212> PRT <213> Homo sapiens

Ala Ser Asn Pro Thr Glu Pro Ala Thr Ile Ile Phe Thr Ala Ala Arg 85 90 Glu Gly Arg Glu Thr Leu Lys Cys Leu Ser His His Val Ala Asp Ala 105 Tyr Thr Ser Ser Gln Lys Val Ser Pro Ile Gln Ile Asp Gly Ala Gly 120 125 Arg Thr Trp Gln Asp Ser Asp Thr Val Lys Leu Leu Val Asp Leu Glu 135 140 Leu Ser Tyr Gly Phe Glu Asn Gly Gln Lys Ala Ala Val Val His His 150 155 Phe Glu Ser Phe Pro Ala Gly Ser Thr Leu Ile Phe Tyr Lys Tyr Cys 165 170 Asp His Glu Asn Ala Ala Phe Lys Asp Val Ala Leu Val Leu Thr Val 180 185 190 Leu Leu Glu Glu Glu Thr Leu Glu Ala Ser Val Gly Pro Arg Glu Thr 205 195 200 Glu Glu Lys Val Arg Asp Leu Leu Trp Ala Lys Phe Thr Asn Ser * 215 220 223

<210> 1552 <211> 57 <212> PRT <213> Homo sapiens

<210> 1553 <211> 241 <212> PRT <213> Homo sapiens

<400> 1553 Met Ser Cys Val Leu Gly Gly Val Ile Pro Leu Gly Leu Leu Phe Leu Val Cys Gly Ser Gln Gly Tyr Leu Leu Pro Asn Val Thr Leu Leu Glu 25 30 Glu Leu Leu Ser Lys Tyr Gln His Asn Glu Ser His Ser Arg Val Arg 35 40 Arg Ala Ile Pro Arg Glu Asp Lys Glu Glu Ile Leu Met Leu His Asn 55 Lys Leu Arg Gly Gln Val Gln Pro Gln Ala Ser Asn Met Glu Tyr Met 70 75 Thr Trp Asp Asp Glu Leu Glu Lys Ser Ala Ala Ala Trp Ala Ser Gln 90 Cys Ile Trp Glu His Gly Pro Thr Ser Leu Leu Val Ser Ile Gly Gln

105 Asn Leu Gly Ala His Trp Gly Arg Tyr Arg Ser Pro Gly Phe His Val 120 125 Gln Ser Trp Tyr Asp Glu Val Lys Asp Tyr Thr Tyr Pro Tyr Pro Ser 135 140 Glu Cys Asn Pro Trp Cys Pro Glu Arg Cys Ser Gly Pro Met Cys Thr 150 155 His Tyr Thr Gln Ile Val Trp Ala Thr Thr Asn Lys Ile Gly Cys Ala 165 170 175 Val Asn Thr Cys Arg Lys Met Thr Val Trp Gly Glu Val Trp Glu Asn 185 190 180 Ala Val Tyr Phe Val Cys Asn Tyr Ser Pro Lys Gly Asn Trp Ile Gly 195 200 Glu Ala Pro Tyr Lys Asn Gly Arg Pro Cys Ser Glu Cys Pro Pro Ser 215 220 Tyr Gly Gly Ser Cys Arg Asn Asn Leu Cys Tyr Arg Glu Glu Thr Tyr 230 235 Thr 241

<210> 1554 <211> 56 <212> PRT

<213> Homo sapiens

<210> 1555 <211> 64 <212> PRT <213> Homo sapiens

<210> 1556

<211> 71 <212> PRT <213> Homo sapiens

<210> 1557 <211> 126 <212> PRT <213> Homo sapiens

<400> 1557 Met Gln Thr His Leu Gly Ala Ser Cys Leu Ser Leu Val Ile Arg Ile 1 5 10 15 Ala Leu Leu Phe Leu Val Gln Arg Asp Gly His Leu His Ser Arg Arg 25 20 Glu Ile Tyr Ala Ile Phe Thr Lys Gly Ser Leu Cys Pro Ala Phe Lys 40 35 Trp Ala Arg Val Gly Arg Glu Leu Phe Leu His Leu Leu Leu Ser Asn 55 Cys His Gln Leu Lys Ile Ile Leu Ile Pro Lys Cys His Ile Leu Gly 65 70 75 80 Trp His Ile Leu Ile Pro Phe Thr Ser Lys Ile Trp Asp Ser Tyr Phe 90 85 Ile Val Gln Cys Phe Ser His Phe Thr Thr Leu Ala Asn Val Phe Met 105 Glu Glu Asp Asn Pro Val Ser Glu Leu Gln Val Phe Gln * 115 120

<210> 1558 <211> 135 <212> PRT <213> Homo sapiens

| Pho | Gln | Leu | Pro | His | Lys | Arg | Glu | Pho | Ser | Glu | Glu | Asn | Pro | Ala | Gln | Gln | Glu | Pro | Pro

<210> 1559 <211> 203 <212> PRT <213> Homo sapiens

<400> 1559 Met Glu Leu Trp Gly Ala Tyr Leu Leu Leu Cys Leu Phe Ser Leu Leu 10 Thr Gln Val Thr Thr Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val Asn Ala Lys Lys Asp Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys 35 40 Ser Arg Leu Asp Thr Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln 55 Gln Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys 70 75 Cys Phe Leu Ala Phe Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu 85 90 Asp Cys Ile Ser Arg Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser 105 Glu Asn Asp Ala Leu Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu 115 120 125 Ala Glu Ile Trp Leu Gly Leu Asn Asp Met Ala Ala Glu Gly Thr Trp 135 140 Val Asp Met Thr Gly Ala Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu 150 155 Ile Thr Ala Gln Pro Asp Gly Gly Lys Thr Glu Asn Cys Ala Val Leu 170 165 Ser Gly Ala Ala Asn Gly Lys Trp Phe Asp Lys Arg Cys Arg Asp Gln 185

<210> 1560 <211> 59 <212> PRT <213> Homo sapiens

Leu Pro Tyr Ile Cys Gln Phe Gly Ile Val *

<210> 1561 <211> 50 <212> PRT <213> Homo sapiens

<210> 1562 <211> 49 <212> PRT <213> Homo sapiens

<210> 1563 <211> 69 <212> PRT <213> Homo sapiens

50 55 60 His Lys Gln Pro * 65 68

> <210> 1564 <211> 53 <212> PRT <213> Homo sapiens

Met Pro Arg Arg Gly Leu Ile Leu His Thr Arg Thr His Trp Leu Leu

<210> 1565 <211> 236 <212> PRT <213> Homo sapiens

<400> 1565

10 Leu Gly Leu Ala Leu Leu Cys Ser Leu Val Leu Phe Met Tyr Leu Leu 20 25 30 Glu Cys Ala Pro Gln Thr Asp Gly Asn Ala Ser Leu Pro Gly Val Val 40 Gly Glu Asn Tyr Gly Lys Glu Tyr Tyr Gln Ala Leu Leu Gln Glu Gln 55 Glu Glu His Tyr Gln Thr Arg Ala Thr Ser Leu Lys Arg Gln Ile Ala 70 75 Gln Leu Lys Gln Glu Leu Gln Glu Met Ser Glu Lys Met Arg Ser Leu 90 85 Gln Glu Arg Arg Asn Val Gly Ala Asn Gly Ile Gly Tyr Gln Ser Asn 100 105 Lys Glu Gln Ala Pro Ser Asp Leu Leu Glu Phe Leu His Ser Gln Ile 115 120 125 Asp Lys Ala Glu Val Ser Ile Gly Ala Lys Leu Pro Ser Glu Tyr Gly 140 135 Val Ile Pro Phe Glu Ser Phe Thr Leu Met Lys Val Phe Gln Leu Glu 150 155 Met Gly Leu Thr Arg His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys 165 170 Arg Asp Glu Leu Val Glu Val Ile Glu Ala Gly Leu Glu Val Ile Asn 185 Asn Pro Asp Glu Asp Asp Glu Gln Glu Asp Glu Glu Gly Pro Leu Gly 200 Glu Lys Leu Ile Phe Asn Glu Asn Asp Phe Val Glu Gly Tyr Tyr Arg

Thr Glu Arg Asp Lys Gly Thr Gln Tyr Glu Leu Phe 225 230 235 236

<210> 1566 <211> 77 <212> PRT <213> Homo sapiens

<210> 1567 <211> 104 <212> PRT <213> Homo sapiens

<400> 1567 Met Leu Ile Gly Leu Leu Ala Trp Leu Gln Thr Val Pro Ala His Gly 1 5 10 15 Cys Gln Phe Leu Pro Ile Thr Ser Val Thr Ala Thr Val Tyr His Leu 25 20 Pro Val His Gln Leu Lys Gly Arg Ser Arg Val Gln Lys Asn Leu Thr 40 Leu Asp Asn Glu Gly Glu Gly Thr Trp Thr Thr Cys Leu Glu Phe Leu 60 Glu Ser Leu Ala Gly Trp Arg Leu Gly Trp Gly Val Ser Arg Gly Val 70 75 Arg Glu Trp Leu Cys Leu Gln Gln Val Ser Leu His Gln Thr Pro Gly 85 Leu Pro His Lys Gln Asp Leu *

<210> 1568 <211> 46 <212> PRT <213> Homo sapiens

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20
                            25
Ala Glu Lys Asn Met His Leu Thr Asn His Val Asn Ser *
        35
                         40
     <210> 1569
     <211> 50
     <212> PRT
     <213> Homo sapiens
     <400> 1569
Met Leu Met Met Asp Thr Leu Trp Pro Ile Leu Leu Gln Thr Leu Lys
                                10
Val Ile Ser Gln Val Gly His Ala Gly Pro Leu Ala Asn Met Ile His
                          25
     20
Asp Asn Pro Cys Ile Ile Ala Tyr Arg Ile Thr Leu Arg Leu Val Gly
                          40
                                        45
Pro
 49
     <210> 1570
     <211> 50
     <212> PRT
     <213> Homo sapiens
  <400> 1570
Met Val Gly Phe Asp Leu Leu Pro Leu Leu Phe Phe Pro Phe Phe
                              10
Pro Ser Leu Ile Phe Phe Pro Phe Phe Ser Ser Pro Ser Pro Ser Phe
                   25 30
    20
Gln Phe Leu Pro His Gln Glu Lys Ser Gln His Val Phe Pro Pro Asn
                         40
Ala *
 49
     <210> 1571
     <211> 50
     <212> PRT
     <213> Homo sapiens
    <400> 1571
Met Tyr Leu Trp Val Val Arg Trp Lys Trp Cys Leu Gln Lys Leu Gly
               5
                              10
Arg Arg Ile Leu Leu His Ser Leu His Asp Val Phe Ile Ala Asn Met
     20 25
Asp Asp Lys Gly Leu Cys Tyr Arg Gly Leu Arg Ala Pro Ser Phe Leu
                  . 40
       35
Leu *
49
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<210> 1572 <211> 80 <212> PRT <213> Homo sapiens

<400> 1572

 Met
 Ser
 Ser
 Gly
 Arg
 Asn
 Phe
 Gly
 Phe
 Cys
 Phe
 Gln
 Trp
 Leu
 Pro
 Trp
 15

 Ala
 Leu
 Val
 Ala
 Trp
 Ala
 Ser
 Val
 Thr
 Val
 Leu
 Met
 Ser
 Ser
 Ser
 His

 Ser
 Ser
 Val
 Gly
 Ser
 Gly
 Leu
 Cys
 Pro
 Met
 Asp
 Phe
 Cys
 Ser
 Thr
 Leu
 Ser
 Ser
 Thr
 Leu
 Ser
 Ser
 Thr
 Ser
 Ser
 Val
 Ala
 Met
 Pro
 Thr
 *

 Ser
 Leu
 Leu
 Ser
 Ser
 Ser
 Thr
 Lys
 Ser
 Val
 Ala
 Met
 Pro
 Thr
 *

 Ser
 Leu
 Leu
 Ser
 Ser
 Ser
 Thr
 Lys
 Ser</t

<210> 1573 <211> 52 <212> PRT <213> Homo sapiens

<210> 1574 <211> 200 <212> PRT <213> Homo sapiens

100 105 Lys Arg Leu Thr Gly Pro Gly Leu Ser Glu Gly Pro Glu Pro Ser Ile 120 125 Ser Val Met Val Thr Gly Gly Pro Trp His Thr Arg Leu Ser Arg Thr 135 140 Cys Leu His Tyr Leu Gly Glu Phe Gly Glu Asp Gln Ile Tyr Glu Ala 150 155 His Gln Gln Gly Arg Gly Ala Leu Glu Ala Leu Leu Cys Gly Gly Pro 165 170 Pro Gly Gly Leu Leu Arg Glu Gly Val Ser His Lys Arg Arg Ala Leu 180 185 Val Leu Asp Ser Thr Leu Leu * 195 199

<210> 1575
<211> 51
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1)...(51)
<223> Xaa = any amino acid or nothing

<210> 1576 <211> 124 <212> PRT <213> Homo sapiens

<400> 1576 Met Arg Ile Arg Leu Leu Cys Cys Val Ala Phe Ser Leu Leu Trp Ala Gly Pro Val Ile Ala Gly Ile Thr Gln Ala Pro Thr Ser Gln Ile Leu 20 25 Ala Ala Gly Arg Arg Met Thr Leu Arg Cys Thr Gln Asp Met Arg His 35 40 Asn Ala Met Tyr Trp Tyr Arg Gln Asp Leu Gly Leu Gly Leu Arg Leu 55 Ile His Tyr Ser Asn Thr Ala Gly Thr Thr Gly Lys Gly Glu Val Pro 70 75 Asp Gly Tyr Ser Val Ser Arg Ala Asn Thr Asp Asp Phe Pro Leu Thr 90 Leu Ala Ser Ala Val Pro Ser Gln Thr Ser Val Tyr Phe Cys Ala Ser 105

Ser Asp Gly Ala Ser Gly Ser Pro His Thr Gly Glu 115 120 124

<210> 1577 <211> 860 <212> PRT <213> Homo sapiens

<400> 1577 Met Ala Cys Arg Trp Ser Thr Lys Glu Ser Pro Arg Trp Arg Ser Ala 10 Leu Leu Leu Phe Leu Ala Gly Val Tyr Gly Asn Gly Ala Leu Ala Glu His Ser Glu Asn Val His Ile Ser Gly Val Ser Thr Ala Cys Gly Glu Thr Pro Glu Gln Ile Arg Ala Pro Ser Gly Ile Ile Thr Ser Pro 55 Gly Trp Pro Ser Glu Tyr Pro Ala Lys Ile Asn Cys Ser Trp Phe Ile 70 Arg Ala Asn Pro Gly Glu Ile Ile Thr Ile Ser Phe Gln Asp Phe Asp 90 Ile Gln Gly Ser Arg Arg Cys Asn Leu Asp Trp Leu Thr Ile Glu Thr 100 105 Tyr Lys Asn Ile Glu Ser Tyr Arg Ala Cys Gly Ser Thr Ile Pro Pro 115 125 120 Pro Tyr Ile Ser Ser Gln Asp His Ile Trp Ile Arg Phe His Ser Asp 135 140 Asp Asn Ile Ser Arg Lys Gly Phe Arg Leu Ala Tyr Phe Ser Gly Lys 150 155 Ser Glu Glu Pro Asn Cys Ala Cys Asp Gln Phe Arg Cys Gly Asn Gly 170 165 Lys Cys Ile Pro Glu Ala Trp Lys Cys Asn Asn Met Asp Glu Cys Gly 185 Asp Arg Ser Asp Glu Glu Ile Cys Ala Lys Glu Ala Asn Pro Pro Thr 200 Ala Ala Ala Phe Gln Pro Cys Ala Tyr Asn Gln Phe Gln Cys Leu Ser 215 220 Arg Phe Thr Lys Val Tyr Thr Cys Leu Pro Glu Ser Leu Lys Cys Asp 230 235 Gly Asn Ile Asp Cys Leu Asp Leu Gly Asp Glu Ile Asp Cys Asp Val 250 245 Pro Thr Cys Gly Gln Trp Leu Lys Tyr Phe Tyr Gly Thr Phe Asn Ser 265 Pro Asn Tyr Pro Asp Phe Tyr Pro Pro Gly Ser Asn Cys Thr Trp Leu 280 285 Ile Asp Thr Gly Asp His Arg Lys Val Ile Leu Arg Phe Thr Asp Phe 295 300 Lys Leu Asp Gly Thr Gly Tyr Gly Asp Tyr Val Lys Ile Tyr Asp Gly 315 310 Leu Glu Glu Asn Pro His Lys Leu Leu Arg Val Leu Thr Ala Phe Asp 325 330 Ser His Ala Pro Leu Thr Val Val Ser Ser Ser Gly Gln Ile Arg Val 345 His Phe Cys Ala Asp Lys Val Asn Ala Ala Arg Gly Phe Asn Ala Thr 360 Tyr Gln Val Asp Gly Phe Cys Leu Pro Trp Glu Ile Pro Cys Gly Gly

	370					375					380				
Asn 385		Gly	Cys	Tyr	Thr 390		Gln	Gln	Arg	Cys 395		Gly	Tyr	Trp	His 400
Cys	Pro	Asn	Gly	Arg 405	Asp	Glu	Thr	Asn	Cys 410	Thr	Met	Cys	Gln	Lys 415	Glu
Glu	Phe	Pro	Cys 420	Ser	Arg	Asn	Gly	Val 425	Cys	Tyr	Pro	Arg	Ser 430		Arg
Cys	Asn	Tyr 435	Gln	Asn	His	Сув	Pro 440	Asn	Gly	Ser	Asp	Glu 445	Lys	Asn	Cys
	450	-	Gln			455					460			_	
465			Trp		470	_			_	475	-	_	_	_	480
	_		Asn	485					490		_		_	495	
			Gly 500				-	505					510		
		515	Cys				520					525		_	
	530		Gln			535					540				
545			Ser		550					555	_				560
		_	Phe	565		_			570					575	
			Leu 580					585					590		
		595	Ala	-	_		600			_		605			
	610		Ser			615					620				
625			Val		630					635	_				640
			His	645					650			_	_	655	_
			Glu 660					665					670		
		675	Pro		_		680					685			
	690		Cys			695					700		_	_	
705	_		Gly	_	710					715					720
			His	725					730					735	
			Val 740					745					750		
		755	Pro		_		760	_		_		765	_	_	
	770		Asp			775					780				
785			·Val		790					795					800
Ąap	Gln	Gly	Gln	Gly 805	Leu	Arg	Gln	Pro	Tyr 810	Asn	Ala	Thr	Asn	Pro 815	Gly
			Ser 820					825					830		
His	Thr	Ala 835	Gln	Ile	Pro	Asp	Thr 840	Cys	Leu	Glu	Val	Thr 845	Leu	Lys	Asn

Glu Thr Ser Asp Asp Glu Ala Leu Leu Leu Cys * 850 855 859

<210> 1578 <211> 58 <212> PRT <213> Homo sapiens

<210> 1579 <211> 572 <212> PRT <213> Homo sapiens

<400> 1579 Met Arg Arg Arg Ser Arg Met Leu Leu Cys Phe Ala Phe Leu Trp Val 10 Leu Gly Ile Ala Tyr Tyr Met Tyr Ser Gly Gly Gly Ser Ala Leu Ala 25 Gly Gly Ala Gly Gly Gly Ala Gly Arg Lys Glu Asp Trp Asn Glu Ile 40 Asp Pro Ile Lys Lys Lys Asp Leu His His Ser Asn Gly Glu Glu Lys 55 Ala Gln Ser Met Glu Thr Leu Pro Pro Gly Lys Val Arg Trp Pro Asp 70 75 Phe Asn Gln Glu Ala Tyr Val Gly Gly Thr Met Val Arg Ser Gly Gln 85 90 Asp Pro Tyr Ala Arg Asn Lys Phe Asn Gln Val Glu Ser Asp Lys Leu 105 100 Arg Met Asp Arg Ala Ile Pro Asp Thr Arg His Asp Gln Cys Gln Arg 120 Lys Gln Trp Arg Val Asp Leu Pro Ala Thr Ser Val Val Ile Thr Phe 135 140 His Asn Glu Ala Arg Ser Ala Leu Leu Arg Thr Val Val Ser Val Leu 150 155 Lys Lys Ser Pro Pro His Leu Ile Lys Glu Ile Ile Leu Val Asp Asp 170 165 Tyr Ser Asn Asp Pro Glu Asp Gly Ala Leu Leu Gly Lys Ile Glu Lys 185 Val Arg Val Leu Arg Asn Asp Arg Arg Glu Gly Leu Met Arg Ser Arg 195 200 205 Val Arg Gly Ala Asp Ala Ala Gln Ala Lys Val Leu Thr Phe Leu Asp 215 √220 Ser His Cys Glu Cys Asn Glu His Trp Leu Glu Pro Leu Glu Arg

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225
                 230
                                   235
Val Ala Glu Asp Arg Thr Arg Val Val Ser Pro Ile Ile Asp Val Ile
                               250
             245
Asn Met Asp Asn Phe Gln Tyr Val Gly Ala Ser Ala Asp Leu Lys Gly
          260
                            265
Gly Phe Asp Trp Asn Leu Val Phe Lys Trp Asp Tyr Met Thr Pro Glu
                        280
Gln Arg Arg Ser Arg Gln Gly Asn Pro Val Ala Pro Ile Lys Thr Pro
                    295
                                    300
Met Ile Ala Gly Gly Leu Phe Val Met Asp Lys Phe Tyr Phe Glu Glu
                                  315
                 310
Leu Gly Lys Tyr Asp Met Met Asp Val Trp Gly Gly Glu Asn Leu
             325
                               330
Glu Ile Ser Phe Arg Val Trp Gln Cys Gly Gly Ser Leu Glu Ile Ile
                           345
Pro Cys Ser Arg Val Gly His Val Phe Arg Lys Gln His Pro Tyr Thr
              360
Phe Pro Gly Gly Ser Gly Thr Val Phe Ala Arg Asn Thr Arg Arg Ala
                    375 380
Ala Glu Val Trp Met Asp Glu Tyr Lys Asn Phe Tyr Tyr Ala Ala Val
                390
                          395
Pro Ser Ala Arg Asn Val Pro Tyr Gly Asn Ile Gln Ser Arg Leu Glu
                               410
Leu Arg Lys Lys Leu Ser Cys Lys Pro Phe Lys Trp Tyr Leu Glu Asn
                           425
         420
Val Tyr Pro Glu Leu Arg Val Pro Asp His Gln Asp Ile Ala Phe Gly
                        440
                                         445
Ala Leu Gln Gln Gly Thr Asn Cys Leu Asp Thr Leu Gly His Phe Ala
                    455
                                     460
Asp Gly Val Val Gly Val Tyr Glu Cys His Asn Ala Gly Gly Asn Gln
                470
                                   475
Glu Trp Ala Leu Thr Lys Glu Lys Ser Val Lys His Met Asp Leu Cys
          485 490
Leu Thr Val Val Asp Arg Ala Pro Gly Ser Leu Ile Lys Leu Gln Gly
                           505
Cys Arg Glu Asn Asp Ser Arg Gln Lys Trp Glu Gln Ile Glu Gly Asn
                        520
Ser Lys Leu Arg His Val Gly Ser Asn Leu Cys Leu Asp Ser Arg Thr
                    535
                                     540
Ala Lys Ser Gly Gly Leu Ser Val Glu Val Cys Gly Pro Ala Leu Ser
                550 555
Gln Gln Trp Lys Phe Thr Leu Asn Leu Gln Gln *
             565
                                570 571
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<210> 1580 <211> 77 <212> PRT <213> Homo sapiens

Ala Pro Ala Asn Val Ala Lys Ile Gln Leu Arg Leu Ala Gly Gln Lys
50 55 60
Arg Lys His Ser Glu Gly Pro Gly Gly Gly Val Leu *
65 70 75 76

<210> 1581 <211> 494 <212> PRT <213> Homo sapiens

<400> 1581 Met Gly Ser Leu Gln Pro Leu Ala Thr Leu Tyr Leu Leu Gly Met Leu 10 Val Ala Ser Cys Leu Gly Arg Leu Ser Trp Tyr Asp Pro Asp Phe Gln Ala Arg Leu Thr Arg Ser Asn Ser Lys Cys Gln Gly Gln Leu Glu Val Tyr Leu Lys Asp Gly Trp His Met Val Cys Ser Gln Ser Trp Gly Arg 55 Ser Ser Lys Gln Trp Glu Asp Pro Ser Gln Ala Ser Lys Val Cys Gln 70 Arg Leu Asn Cys Gly Val Pro Leu Ser Leu Gly Pro Phe Leu Val Thr Tyr Thr Pro Gln Ser Ser Ile Ile Cys Tyr Gly Gln Leu Gly Ser Phe 100 105 Ser Asn Cys Ser His Ser Arg Asn Asp Met Cys His Ser Leu Gly Leu **125** . 115 120 Thr Cys Leu Glu Pro Gln Lys Thr Thr Pro Pro Thr Thr Arg Pro Pro 135 Pro Thr Thr Pro Glu Pro Thr Ala Pro Pro Arg Leu Gln Leu Val 155 160 Ala Gln Ser Gly Gly Gln His Cys Ala Gly Val Val Glu Phe Tyr Ser 165 170 175 Gly Ser Leu Gly Gly Thr Ile Ser Tyr Glu Ala Gln Asp Lys Thr Gln 180 185 Asp Leu Glu Asn Phe Leu Cys Asn Asn Leu Gln Cys Gly Ser Phe Leu 200 Lys His Leu Pro Glu Thr Glu Ala Gly Arg Ala Gln Asp Pro Gly Glu 215 220 Pro Arg Glu His Gln Pro Leu Pro Ile Gln Trp Lys Ile Gln Asn Ser 225 230 235 Ser Cys Thr Ser Leu Glu His Cys Phe Arg Lys Ile Lys Pro Gln Lys 250 245 Ser Gly Arg Val Leu Ala Leu Leu Cys Ser Gly Phe Gln Pro Lys Val 265 Gln Ser Arg Leu Val Gly Gly Ser Ser Ile Cys Glu Gly Thr Val Glu 280 285 Val Arg Gln Gly Ala Gln Trp Ala Ala Leu Cys Asp Ser Ser Ser Ala 295 300 Arg Ser Ser Leu Arg Trp Glu Glu Val Cys Arg Glu Gln Gln Cys Gly 315 310 Ser Val Asn Ser Tyr Arg Val Leu Asp Ala Gly Asp Pro Thr Ser Arg 325 330 Gly Leu Phe Cys Pro His Gln Lys Leu Ser Gln Cys His Glu Leu Trp 345 Glu Arg Asn Ser Tyr Cys Lys Lys Val Phe Val Thr Cys Gln Asp Pro

360 Asn Pro Ala Gly Leu Ala Ala Gly Thr Val Ala Ser Ile Ile Leu Ala 375 Leu Val Leu Leu Val Val Leu Leu Val Val Cys Gly Pro Leu Ala Tyr 390 395 Lys Lys Leu Val Lys Lys Phe Arg Gln Lys Lys Gln Arg Gln Trp Ile 405. 410 Gly Pro Thr Gly Met Asn Gln Asn Met Ser Phe His Arg Asn His Thr 420 . 425 Ala Thr Val Arg Ser His Ala Glu Asn Pro Thr Ala Ser His Val Asp 440 445 Asn Glu Tyr Ser Gln Pro Pro Arg Asn Ser Arg Leu Ser Ala Tyr Pro 455 460 Ala Leu Glu Gly Ala Leu His Arg Ser Ser Met Gln Pro Asp Asn Ser 470 475 Ser Asp Ser Asp Tyr Asp Leu His Gly Ala Gln Arg Leu * 485 490

<210> 1582 <211> 329 <212> PRT <213> Homo sapiens

(213) NOMO Baptens

<400> 1582 Met Gln Gly Leu Cys Ile Ser Val Ala Val Phe Leu His Tyr Phe Leu 10 Leu Val Ser Phe Thr Trp Met Gly Leu Glu Ala Phe His Met Tyr Leu **25** . Ala Leu Val Lys Val Phe Asn Thr Tyr Ile Arg Lys Tyr Ile Leu Lys 40 Phe Cys Ile Val Gly Trp Gly Val Pro Ala Val Val Thr Ile Ile 60 Leu Thr Ile Ser Pro Asp Asn Tyr Gly Leu Gly Ser Tyr Gly Lys Phe 70 75 Pro Asn Gly Ser Pro Asp Asp Phe Cys Trp Ile Asn Asn Asn Ala Val 85 90 Phe Tyr Ile Thr Val Val Gly Tyr Phe Cys Val Ile Phe Leu Leu Asn 100 105 Val Ser Met Phe Ile Val Val Leu Val Gln Leu Cys Arg Ile Lys Lys 115 120 125 Lys Lys Gln Leu Gly Ala Gln Arg Lys Thr Ser Ile Gln Asp Leu Arg 135 140 Ser Ile Ala Gly Leu Thr Phe Leu Leu Gly Ile Thr Trp Gly Phe Ala 150 155 Phe Phe Ala Trp Gly Pro Val Asn Val Thr Phe Met Tyr Leu Phe Ala 170 165 Ile Phe Asn Thr Leu Gln Gly Phe Phe Ile Phe Ile Phe Tyr Cys Val 180 185 Ala Lys Glu Asn Val Arg Lys Gln Trp Arg Arg Tyr Leu Cys Cys Gly 200 Lys Leu Arg Leu Ala Glu Asn Ser Asp Trp Ser Lys Thr Ala Thr Asn 215 220 Gly Leu Lys Lys Gln Thr Val Asn Gln Gly Val Ser Ser Ser Ser Asn 230 235 Ser Leu Gln Ser Ser Ser Asn Ser Thr Asn Ser Thr Thr Leu Leu Val 250

<210> 1583 <211> 49 <212> PRT <213> Homo sapiens

<210> 1584 <211> 671 <212> PRT <213> Homo sapiens

<400> 1584 Met Ile Ala Ser Cys Leu Cys Tyr Leu Leu Leu Pro Ala Thr Arg Leu 1 5 10 Phe Arg Ala Leu Ser Asp Ala Phe Phe Thr Cys Arg Lys Asn Val Leu 20 25 Leu Ala Asn Ser Ser Ser Pro Gln Val Glu Gly Asp Phe Ala Met Ala 35 40 Pro Arg Gly Pro Glu Gln Glu Glu Cys Glu Gly Leu Leu Gln Gln Trp 55 60 Arg Glu Glu Gly Leu Ser Gln Val Leu Ser Thr Ala Ser Glu Gly Pro 70 75 Leu Ile Asp Lys Gly Leu Ala Gln Ser Ser Leu Ala Leu Leu Met Asp 85 90 Asn Pro Gly Glu Glu Asn Ala Ala Ser Glu Asp Arg Trp Ser Ser Arg 105 100 110 Gln Leu Ser Asp Leu Arg Ala Ala Glu Asn Leu Asp Glu Pro Phe Pro 120 125 Glu Met Leu Gly Glu Glu Pro Leu Leu Glu Val Glu Gly Val Glu Gly 135 140 Ser Met Trp Ala Ala Ile Pro Met Gln Ser Glu Pro Gln Tyr Ala Asp . 155 Cys Ala Ala Leu Pro Val Gly Ala Leu Ala Thr Glu Gln Trp Glu Glu

Asp Pro Ala Val Leu Ala Trp Ser Ile Ala Trp Pro 185 Ile Ile 120 <th></th> <th></th> <th></th> <th></th> <th>165</th> <th></th> <th></th> <th></th> <th></th> <th>170</th> <th></th> <th></th> <th></th> <th></th> <th>175</th> <th></th>					165					170					175	
195	Asp	Pro	Ala			Ala	Trp	Ser			Pro	Glu	Pro		Pro	Gln
210	Glu	Glu		Ser	Ile	Trp	Pro		Glu	Gly	Leu	Gly		Leu	Gln	Pro
235	Pro		Val	Glu	Ile	Pro	_	His	Glu	Ile	Leu	_	Arg	Glu	Trp	Glu
Leu Met Gln Gln Ser Ser Glu Leu Tyr Leu His Cys His Pro Asp 265	_	Phe	Ser	Thr	Gln		Aap	Ala	Gln	Gly		Lys	Ala	Gly	Asp	Gly 240
Leu Asn Trp Asn Tyr Arg Phe Val Asn Leu Met Gln Glu Phe Gln 275					245					250					255	_
275				260					265					270		
290			275					280					285			
315	_	290		_			295					300		_		-
Sample S	305					310					315					320
340 345 345 345 350 365	_		_	_	325	_	-	_		330	_	_			335	_
Secondaria Sec				340					345					350		
370	_		355					360	_	=			365			
385 390 395 Asp Val Lys Leu Ala Gln Met Ala Ile Leu Leu Leu Ala Glu Val Asp 405 405 410 410 415 415 415 410 415 415 415 416 416 415 415 416 420 415 415 410 425 410 415 415 415 420 425 430 430 433 430 440 425 420 445 440 440 445 440 445 440 445 440 445 440 445 460 460 460 460 460 465 470 470 475 475 470 470 475 475 475 475 475 475 475 475 475 475 475 470 475		370					375		_		_	380				
Val Ala Arg Leu Ser Asp Gly Ser His Cys Pro The Leu Cys 430 Asp Leu Asp Leu Apro Asp Ser Pro Leu Tyr Asn Phe Ile Arg Ays Leu Tyr Asn Phe Ile Arg Ays Leu Tyr Ala Trp Lys Val Ser Gly Ags Arg Leu Gly Arg	385					390					395					400
Asp Leu Asn Ser Val Pro Asp Ser Pro Leu Tyr Asn Phe Ile Arg Arg Arg Arg Lys Val Ser Gly Arg Arg Lys Leu Gln Ala Pro Arg Lys Val Ser Gly Arg Arg Lys Leu Gln Arg Arg Arg Arg Arg Ile Thr Arg Lys Lys Leu Gln Arg A	Val	Ala	- Arg	Leu		Asp	Gly	Ser	His		Pro	Ile	Ile	Leu		Gly
Gly Glu Leu Gln Tyr His Gly Met Pro Ala Trp Lys Val Ser Gly 450	Asp	Leu	Asn		Val	Pro	Asp	Ser		Leu	Tyr	Asn	Phe		Arg	Asp
Glu Asp Phe Ser His Gln Leu Tyr Gln Arg Lys Leu Gln Ala Pro 465	Gly	Glu		Gln	Tyr	His	Gly		Pro	Ala	Trp	Lys		Ser	Gly	Gln
Trp Pro Ser Ser Leu Gly Ile Thr Asp Cys Cys Gln Tyr Val Thr 485			Phe	Ser	His			Tyr	Gln	Arg	-		Gln	Ala	Pro	
Cys His Pro Lys Arg Ser Glu Arg Arg Lys Tyr Gly Arg Asp Phe		Pro	Ser	Ser			Ile	Thr	Asp	_		Gln	Tyr	Val		480 Ser
Leu Arg Phe Arg Phe Cys Ser Ile Ala Cys Gln Arg Pro Val Gly 515 520 525 Val Leu Met Glu Gly Val Thr Asp Thr Lys Pro Glu Arg Pro Ala 630 535 540 Trp Ala Glu Ser Val Leu Glu Glu Asp Ala Ser Glu Leu Glu Pro 545 550 555 Phe Ser Arg Thr Val Gly Thr Ile Gln His Cys Leu His Leu Thr 565 570 575 Val Tyr Thr His Phe Leu Pro Gln Arg Gly Arg Pro Glu Val Thr 580 585 585 590 Met Pro Leu Gly Leu Gly Met Thr Val Asp Tyr Ile Phe Phe Ser 595 600 605 605 Glu Ser Cys Glu Asn Gly Asn Arg Thr Asp His Arg Leu Tyr Arg 610 615 620 620 Gly Thr Leu Lys Leu Gly Arg Leu Ser Leu Leu Ser Glu Glu Ser Ser Leu Leu Ser Glu Glu Ser Glu Glu Ser Glu Glu Ser Ser Leu Leu Ser Glu Glu Ser Cys Glu Gl	Cys	His	Pro			Ser	Glu	Arg			Tyr	Gly	Arg			Leu
Val Leu Met Glu Gly Val Thr Asp Thr Lys Pro Glu Arg Pro Ala Ala Arg Pro Ala Ala Ser Glu Leu Glu Pro Ala Ser Glu Leu Glu Pro Arg Ala Ser Glu Leu Glu Pro Blu Arg Arg Leu His Leu His Leu His Leu Thr Arg Arg Pro Glu Arg Arg Leu Thr Arg Arg Leu Thr Arg Leu Thr Arg Leu T	Leu	Arg			Phe	Cys	Ser			Cys	Gln	Arg			Gly	Leu
Trp Ala Glu Ser Val Leu Glu Glu Asp Ala Ser Glu Leu Glu Pro 5545 550 555 555 555 555 555 555 555 55	Val			Glu	Gly	Val			Thr	Lys	Pro			Pro	Ala	Gly
Val Tyr Thr His Phe Leu Pro Gln Arg Gly Arg Pro Glu Val Thr Yal Thr Yal Thr Yal Thr Yal Yal Thr Yal Y			Glu	Ser	Val			Glu	Asp	Ala			Leu	Glu	Pro	Ala 560
Met Pro Leu Gly Leu Gly Met Thr Val Asp Tyr Ile Phe Phe Ser 2 595 600 Glu Ser Cys Glu Asn Gly Asn Arg Thr Asp His Arg Leu Tyr Arg 610 615 Gly Thr Leu Lys Leu Leu Gly Arg Leu Ser Leu Leu Ser Glu Glu 1	Phe	Ser	Arg	Thr		Gly	Thr	Ile	Gln		Cys	Leu	His	Leu		Ser
595 600 605 Glu Ser Cys Glu Asn Gly Asn Arg Thr Asp His Arg Leu Tyr Arg 5610 615 620 Gly Thr Leu Lys Leu Leu Gly Arg Leu Ser Leu Leu Ser Glu Glu 5	Val	Tyr	Thr		Phe	Leu	Pro	Gln		Gly	Arg	Pro	Glu		Thr	Thr
610 615 620 Gly Thr Leu Lys Leu Leu Gly Arg Leu Ser Leu Leu Ser Glu Glu	Meţ	Pro		Gly	Leu	Gly	Met		Val	Asp	Tyr	Ile		Phe	Ser	Ala
		610	•			-	615			-		620		-	_	-
			Leu	Ļув	Leu		Gly	Arg	Leu	Ser		Leu	Ser	Glu	Glu	Ile 640

Leu Trp Ala Ala Asn Gly Leu Pro Asn Pro Phe Cys Ser Ser Asp His
645 650 655

Leu Cys Leu Leu Ala Ser Leu Gly Met Glu Val Thr Ala Pro *
660 665 670

<210> 1585 <211> 318 <212> PRT <213> Homo sapiens

<400> 1585 Met Met Cys Leu Lys Ile Leu Arg Ile Ser Leu Ala Ile Leu Ala Gly 10 Trp Ala Leu Cys Ser Ala Asn Ser Glu Leu Gly Trp Thr Arg Lys Lys 20 25 Ser Leu Val Glu Arg Glu His Leu Asn Gln Val Leu Leu Glu Gly Glu 40 Arg Cys Trp Leu Gly Ala Lys Val Arg Arg Pro Arg Ala Ser Pro Gln 55 His His Leu Phe Gly Val Tyr Pro Ser Arg Ala Gly Asn Tyr Leu Arg 70 Pro Tyr Pro Val Gly Glu Gln Glu Ile His His Thr Gly Arg Ser Lys 90 85 Pro Asp Thr Glu Gly Asn Ala Val Ser Leu Val Pro Pro Asp Leu Thr 105 Glu Asn Pro Ala Gly Leu Arg Gly Ala Val Glu Pro Ala Ala Pro 120 125 Trp Val Gly Asp Ser Pro Ile Gly Gln Ser Glu Leu Leu Gly Asp Asp 135 Asp Ala Tyr Leu Gly Asn Gln Arg Ser Lys Glu Ser Leu Gly Glu Ala 150 155 Gly Ile Gln Lys Gly Ser Ala Met Ala Ala Thr Thr Thr Ala Ile 170 Phe Thr Thr Leu Asn Glu Pro Lys Pro Glu Thr Gln Arg Arg Gly Trp 185 190 Ala Lys Ser Arg Gln Arg Arg Gln Val Trp Lys Arg Arg Ala Glu Asp 200 205 Gly Gln Gly Asp Ser Gly Ile Ser Ser His Phe Gln Pro Trp Pro Lys 215 220 His Ser Leu Lys His Arg Val Lys Lys Ser Pro Pro Glu Glu Ser Asn 230 235 Gln Asn Gly Gly Glu Gly Ser Tyr Arg Glu Ala Glu Thr Phe Asn Ser 245 250 Gln Val Gly Leu Pro Ile Leu Tyr Phe Ser Gly Arg Arg Glu Arg Leu 260 270 265 Leu Leu Arg Pro Glu Val Leu Ala Glu Ile Pro Arg Glu Ala Phe Thr 275 280 285 Val Glu Ala Trp Val Lys Pro Glu Gly Gly Gln Asn Asn Pro Ala Ile 295 Ile Ala Gly Asn Thr Leu Leu Leu Gly Phe Leu Lys Ser * 315

<210> 1586 <211> 80

<212> PRT <213> Homo sapiens

<210> 1587 <211> 316 <212> PRT <213> Homo sapiens

<400> 1587

Met Phe Phe Gly Ser Ala Ala Leu Gly Thr Leu Thr Gly Leu Ile Ser 10 Ala Leu Val Leu Lys His Ile Asp Leu Arg Lys Thr Pro Ser Leu Glu 20 25 Phe Gly Met Met Ile Ile Phe Ala Tyr Leu Pro Tyr Gly Leu Ala Glu 40 Gly Ile Ser Leu Ser Gly Ile Met Ala Ile Leu Phe Ser Gly Ile Val 55 60 Met Ser His Tyr Thr His His Asn Leu Ser Pro Val Thr Gln Ile Leu 70 75 Met Gln Gln Thr Leu Arg Thr Val Ala Phe Leu Cys Glu Thr Cys Val . 85 90 Phe Ala Phe Leu Gly Leu Ser Ile Phe Ser Phe Pro His Lys Phe Glu 105 Ile Ser Phe Val Ile Trp Cys Ile Val Leu Val Leu Phe Gly Arg Ala 120 125 Val Asn Ile Phe Pro Leu Ser Tyr Leu Leu Asn Phe Phe Arg Asp His 135 140 Lys Ile Thr Pro Lys Met Met Phe Ile Met Trp Phe Ser Gly Leu Arg 150 155 Gly Ala Ile Pro Tyr Ala Leu Ser Leu His Leu Asp Leu Glu Pro Met 165 170 Glu Lys Arg Gln Leu Ile Gly Thr Thr Thr Ile Val Ile Val Leu Phe 185 190 Thr Ile Leu Leu Leu Gly Gly Ser Thr Met Pro Leu Ile Arg Leu Met 205 200 Asp Ile Glu Asp Ala Lys Ala His Arg Arg Asn Lys Lys Asp Val Asn 215 220 Leu Ser Lys Thr Glu Lys Met Gly Asn Thr Val Glu Ser Glu His Leu 230 235 Ser Glu Leu Thr Glu Glu Glu Tyr Glu Ala His Tyr Ile Arg Arg Gln Asp Leu Lys Gly Phe Val Trp Leu Asp Ala Lys Tyr Leu Asn Pro Phe 265

Phe Thr Arg Arg Leu Thr Gln Glu Asp Leu His His Gly Arg Ile Gln
275

Met Lys Thr Leu Thr Asn Lys Trp Tyr Glu Glu Val Arg Gln Gly Pro
290

Ser Gly Ser Glu Asp Asp Glu Gln Glu Leu Leu *
305

310

315

<210> 1588
<211> 53
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1)...(53)
<223> Xaa = any amino acid or nothing

<210> 1589 <211> 437 <212> PRT <213> Homo sapiens

<400> 1589 Met Leu Lys Val Ser Ala Val Leu Cys Val Cys Ala Ala Ala Trp Cys 1 5 10 Ser Gln Ser Leu Ala Ala Ala Ala Ala Val Ala Ala Gly Gly Arg 25 20 Ser Asp Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu Thr Thr Ile 40 Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys Phe Arg Asp Glu 55 Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro Gly Lys Pro Phe Asp 75 70 Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys Leu Lys Met Lys Cys Ser 90 85 Arg His Lys Val Cys Ile Ala Gln Asp Ser Gln Thr Ala Val Cys Ile 110 100 105 Ser His Arg Arg Leu Thr His Arg Met Lys Glu Ala Gly Val Asp His 120 125 Arg Gln Trp Arg Gly Pro Ile Leu Ser Thr Cys Lys Gln Cys Pro Val 1.35 140 Val Tyr Pro Ser Pro Val Cys Gly Ser Asp Gly His Thr Tyr Ser Phe 155 150 Gln Cys Lys Leu Glu Tyr Gln Ala Cys Val Leu Gly Lys Gln Ile Ser

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165
                          170
Val Lys Cys Glu Gly His Cys Pro Cys Pro Ser Asp Lys Pro Thr Ser
             185
Thr Ser Arg Asn Val Lys Arg Ala Cys Ser Asp Leu Glu Phe Arg Glu
  195 200
                          205
Val Ala Asn Arg Leu Arg Asp Trp Phe Lys Ala Leu His Glu Ser Gly
                       220
 210 215
Ser Gln Asn Lys Lys Thr Lys Thr Leu Leu Arg Pro Glu Arg Ser Arg
225 230 235
Phe Asp Thr Ser Ile Leu Pro Ile Cys Lys Asp Ser Leu Gly Trp Met
      245
                250
Phe Asn Arg Leu Asp Thr Asn Tyr Asp Leu Leu Asp Gln Ser Glu
       260
                       265
Leu Arg Ser Ile Tyr Leu Asp Lys Asn Glu Gln Cys Thr Lys Ala Phe
                            285
                    280
Phe Asn Ser Cys Asp Thr Tyr Lys Asp Ser Leu Ile Ser Asn Asn Glu
 290 295
                        300
Trp Cys Tyr Cys Phe Gln Arg Gln Gln Asp Pro Pro Cys Gln Thr Glu
                             315
305 310
Leu Ser Asn Ile Gln Lys Arg Gln Gly Val Lys Lys Leu Leu Gly Gln
                         330 335
           325
Tyr Ile Pro Leu Cys Asp Glu Asp Gly Tyr Tyr Lys Pro Thr Gln Cys
  340 345 350
His Gly Ser Val Gly Gln Cys Trp Cys Val Asp Arg Tyr Gly Asn Glu
355 360 365
Val Met Gly Ser Arg Ile Asn Gly Val Ala Asp Cys Ala Ile Asp Phe
                        380
                 375
Glu Ile Ser Gly Asp Phe Ala Ser Gly Asp Phe His Glu Trp Thr Asp
               390
                             395
Asp Glu Asp Asp Glu Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu
                  410 415
           405
Asp Asp Asp Glu Asp Glu Gly Asp Asp Asp Gly Gly Asp Asp His
      420
                      425
Asp Val Tyr Ile *
     435 436
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<210> 1590 <211> 49 <212> PRT <213> Homo sapiens

<400> 1590 Met Phe Gln Ile Tyr Phe Ser Phe Cys Gln Leu Cys Phe Ile Trp Ser

1 5 10 15

Cys Phe Phe Asn Ser Arg Glu Thr Phe Asn Glu Ile Tyr Lys Phe Phe
20 25 30

Leu Lys Ser Val Met Val Arg Lys Ile Phe Glu Cys His Lys Met Ser

<210> 1591 <211> 73 <212> PRT

<213> Homo sapiens

<210> 1592 <211> 62 <212> PRT <213> Homo sapiens

<210> 1593 <211> 128 <212> PRT <213> Homo sapiens

<400> 1593 Met Arg Ala Met Leu Gly Thr Cys Ala Leu Gly Gln Phe Phe Leu Ile 10 Met Gly Asn Thr Gln Arg Cys Asp Asp Phe Pro Thr Glu Ser Pro Pro Ala Lys Thr Asn Val Ser Arg Ala Gly Leu Ser Pro Pro Cys Glu Ala 40 45 Leu His Gly Val Glu Ser Arg Gly Ser Cys Ser His Gly Lys Leu Gln 55 Ser Pro Pro Gly Arg Asp Trp Pro Gln Gly Asp Pro Gln Asp Arg Pro 70 Lys Arg Arg Trp Gln Arg Pro Gly Pro Ala Gly Arg Gly Ala Pro Asp 90 Pro Thr Pro Lys Gly Gln Gly Ala Ala Val Pro Pro Arg Ser Ala Ser 105 Met Phe Leu Ile His Lys Gln Met Trp Ala Tyr Gly Phe Gly Asp * 120

<210> 1594 <211> 46 <212> PRT <213> Homo sapiens

<210> 1595 <211> 86 <212> PRT <213> Homo sapiens

<210> 1596 <211> 69 <212> PRT <213> Homo sapiens

<210> 1597 <211> 56 <212> PRT <213> Homo sapiens

<400> 1597

<210> 1598 <211> 97 <212> PRT <213> Homo sapiens

<400> 1598

Met His Glu Ser Pro Leu Ala Trp Ala Ser Val His Leu Ser Ser Leu 5 10 Pro Leu Leu Cys Thr Ala Cys Ser Ser Pro Leu Met Gly Asn Ser Val 25 20 Leu Cys Arg Ala Pro Ala Asp Met Gly Leu Ala Trp Met Leu Leu Leu 35 40 45 Ser Glu Pro Arg Arg Val Val Pro Gly Ile Ala Ala Gln Val Leu Thr Ala Leu Arg Arg Arg Leu Leu Ser Gly Thr Leu Pro Ser Phe Pro Arg .70 75 Arg Lys Asn Pro Leu His Glu His Leu Leu Ala Phe Ile Val Arg Leu 95 96 90

<210> 1599 <211> 113 <212> PRT <213> Homo sapiens

<400> 1599

 Met
 Thr
 Val
 Ser
 Gly
 Thr
 Val
 Leu
 Val
 Ala
 Gly
 Thr
 Leu
 Cys
 Phe

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65 70 75 80

Asp Pro Tyr His Leu Ser Arg Asp Leu Tyr Tyr Leu Thr Val Glu Ser 85 90 95

Ser Glu Lys Glu Ser Cys Arg Thr Pro Lys Val Val Asp Ile Pro Asp 100 112

<210> 1600 <211> 103 <212> PRT <213> Homo sapiens

<400> 1600 Met Gly Ala Trp Ala Trp Val Pro Thr Pro Ser Leu Cys Leu Cys His 10 Ser Thr Cys Leu Glu Phe Leu Leu Phe Leu Tyr Ile Leu Phe Tyr Cys 20 25 Ile Phe Glu Thr Val Ser Leu Ser Pro Arg Leu Glu Arg Ser Gly Ala 40 Ile Leu Ala Arg Cys Asn Leu Cys Leu Arg Gly Ser Ser Asp Ser Arg 50 55 60 Ala Leu Ala Ser Arg Val Ala Glu Thr Thr Gly Met His His Ala 70 75 Trp Leu Ile Phe Ala Phe Leu Val Glu Thr Gly Phe His His Val Gly 85 Gln Ala Gly Leu Asn Ser 100 102

<210> 1601 <211> 84 <212> PRT <213> Homo sapiens

<210> 1602 <211> 91 <212> PRT

<213> Homo sapiens

<210> 1603 <211> 69 <212> PRT

<213> Homo sapiens

<210> 1604 <211> 83 <212> PRT <213> Homo sapiens

<400> 1604 Met Leu Gln Pro Met Phe Phe Thr Leu Ser Thr His Leu Val Gly Leu 5 10 Ser Gln Ile Ser Tyr Leu Ser Phe Pro Leu Ile Ser Leu His Pro Ala 20 25 Gln Val Val Lys Arg Gln Ser Ser Leu Pro Arg Leu Met Gln Ser Ser 40 Lys Glu Ser Lys Ala Val Leu Val Glu Ile Ile Leu Arg Ala Arg Lys 55 60 Val Val Lys Tyr Ile Ser Lys Gly Phe Leu Arg Ala Val Cys Ala Glu . 70 75 Met Ile * 82

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<210> 1605

<211> 110

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(110)

<223> Xaa = any amino acid or nothing
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<400> 1605 Met Ser Thr Ile Ile Phe Gln Trp Pro Phe Met Leu Val Ser Leu His 10 Arg Cys Arg Lys Leu Pro Arg Ala Leu Lys Asp Trp Gln Ala Phe Leu 20 25 Asp Leu Lys Lys Ile Ile Asp Asp Phe Ser Glu Cys Cys Pro Leu Leu 40 Glu Tyr Met Gly Ser Lys Ala Met Met Glu Arg His Xaa Glu Arg Ile 55 60 Thr Thr Leu Thr Gly His Ser Leu Asp Val Gly Asn Glu Ser Phe Lys 70 **75** . Leu Arg Asn Ile Met Glu Ala Pro Leu Leu Xaa Tyr Lys Glu Glu Ile 85 90 Glu Val Glu Tyr Asp Val Met Glu Asp Cys Lys Val Ser Trp 100 105

<210> 1606
<211> 72
<212> PRT
<213> Homo sapiens

Ile Thr Met Lys Met Leu Ala † 65 70 71

> <210> 1607 <211> 59 <212> PRT <213> Homo sapiens

<400> 1607
Met Phe Thr Arg Phe Ile Gly Leu Phe Leu Lys Phe Ile Leu Met Phe
1 5 10 15

 Phe
 Leu
 Leu
 Ser
 Phe
 Ile
 Ser
 Tyr
 Phe
 Cys
 Leu
 Phe
 Pro
 Cys
 Ser

 Asn
 Leu
 Pro
 Lys
 Val
 Ile
 Ala
 Ile
 Phe
 Asn
 Ile
 Val
 Leu
 Ile
 Leu
 Ser

 35
 40
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 45
 45
 Ile
 Ile
 Val
 Phe
 Arg
 Glu
 Ile
 Thr
 Asp
 Thr
 Tyr
 *
 50
 58

<210> 1608 <211> 118 <212> PRT <213> Homo sapiens

<400> 1608 Met Leu Val Thr Asp Thr Glu Ala Phe Trp Gln Pro Gln Pro Trp Phe 10 Val Val Leu Thr Ala Thr Gly Ala Leu Leu Leu Ala Leu Gly 25 Trp Leu Leu Gly Arg Leu Leu Gln Gly Leu Ala Gln Leu Leu Gln Ala 35 40 45 Pro Ser Lys Pro Ala Gln Ala Leu Leu Leu Asn Ser Ile Gln Gly Thr 60 55 Glu Gly Ser Ile Glu Gly Phe Leu Glu Ala Pro Lys Met Glu Met Ser 70 Gln Ala Pro Ser Ser Val Met Ser Leu Gln His Phe Asp Gly Arg Thr 85 90 95 Gln Asp Ser Arg Thr Gly Arg Asp Tyr Leu Val Asn Thr His Thr Gly 100 105 Ala Arg Arg Trp Leu 115 117

<210> 1609 <211> 50 <212> PRT <213> Homo sapiens

<210> 1610 <211> 50 <212> PRT <213> Homo sapiens

<400> 1610 Met Val Leu Ile Leu Ser Pro Gly Leu Ser Ile Leu Phe Thr Lys Met 5 10 Ser Glu Thr Phe Ser Ser Ser Leu Leu Lys Leu Ser Ser Ser Ile Cys 20 25 Ile Phe Pro Leu Cys Ile Asn Met Ile Ile Cys Tyr Gln Lys Lys Ser Gln * 49

<210> 1611 <211> 56 <212> PRT <213> Homo sapiens

<400> 1611 Met Ser Phe Gln Ala Phe Val Phe Leu Met Ile Gly Trp Leu His Pro Asp Pro Arg Leu Met Thr Gln Arg Ser Cys Gly Pro His Pro Glu Val . 20 25 30 Asp Ser Ala Gln Glu Asp His Phe Ser His Pro Tyr Asp Ile Pro Asn 35 40 Gln Ser Ala Pro Pro Leu Pro 50

<210> 1612 <211> 75 <212> PRT <213> Homo sapiens

<400> 1612 Met Leu Thr Leu Ala Leu Leu Val Leu Arg Ile Cys Val Cys Glu Ala 5 10 Ala Ser Thr Phe Val Cys Pro Cys Leu Pro Trp Leu Ser Leu Leu Phe 20 25 Leu His Leu Leu Pro Arg Leu Phe Gln Val Gln Ile Trp Phe Leu Leu 40 Phe Leu Pro Phe Leu Leu Leu Pro Ser Val Pro Glu Ile Phe Pro 55 Ala Pro Gln Ala Trp Gly Leu Gly Cys Ser * 70

<210> 1613 <211> 192 <212> PRT <213> Homo sapiens

<400> 1613 Met Phe Thr Cys Leu Phe Leu Phe Ser Ala Val Leu Arg Ala Leu Phe

Arg Lys Ser Asp Pro Lys Arg Phe Gln Asn Ile Phe Thr Thr Ile Phe 25 20 Thr Leu Phe Thr Leu Leu Thr Leu Asp Asp Trp Ser Leu Ile Tyr Met 40 Asp Ser Arg Ala Gln Gly Ala Trp Tyr Ile Ile Pro Ile Leu Ile Ile 60 55 Tyr Ile Ile Ile Gln Tyr Phe Ile Phe Leu Asn Leu Val Ile Thr Val 75 70 Leu Val Asp Ser Phe Gln Thr Ala Leu Phe Lys Gly Leu Glu Lys Ala 90 85 Lys Gln Glu Arg Ala Ala Arg Ile Gln Glu Lys Leu Leu Glu Asp Ser 105 Leu Thr Glu Leu Arg Ala Ala Glu Pro Lys Glu Val Ala Ser Glu Gly 125 120 Thr Met Leu Lys Arg Leu Ile Glu Lys Lys Phe Gly Thr Met Thr Glu 135 140 Lys Gln Gln Glu Leu Leu Phe His Tyr Leu Gln Leu Val Ala Ser Val 150 155 Glu Gln Glu Gln Lys Phe Arg Ser Gln Ala Ala Val Ile Asp Glu 165 170 175 Ile Val Asp Thr Thr Phe Glu Ala Gly Glu Glu Asp Phe Arg Asn * 185 180

<210> 1614 <211> 153 <212> PRT <213> Homo sapiens

<400> 1614 Met Asp Leu Val Gln Phe Phe Val Thr Phe Phe Ser Cys Phe Leu Ser 5 Leu Leu Leu Val Ala Ala Val Val Trp Lys Ile Lys Gln Thr Cys Trp 25 Ala Ser Arg Arg Glu Gln Leu Leu Arg Glu Arg Gln Gln Met Ala 35 Ser Arg Pro Phe Ala Ser Val Asp Val Ala Leu Glu Val Gly Ala Glu 55 Gln Thr Glu Phe Leu Arg Gly Pro Leu Glu Gly Ala Pro Lys Pro Ile 70 75 Ala Ile Glu Pro Cys Ala Gly Asn Arg Ala Ala Val Leu Thr Val Phe 90 85 Leu Cys Leu Pro Arg Gly Ser Ser Gly Ala Pro Pro Pro Gly Gln Ser 100 105 110 Gly Leu Ala Ile Ala Ser Ala Leu Ile Asp Ile Ser Gln Gln Lys Ala 120 125 Ser Asp Ser Lys Asp Lys Thr Ser Gly Val Arg Asn Arg Lys His Leu 140 135 Ser Thr Arg Gln Gly Thr Cys Val * 150 152

<210> 1615 <211> 135 <212> PRT <213> Homo sapiens

<400> 1615 Met His Trp Leu Arg Ala Ser Ala Gly Ser Leu Leu Met Val Pro Leu 1 5 10 Met Thr Asp Leu His Glu Leu Ala Leu Pro Pro Ala Ser Leu Arg Thr 25 20 Val Val Lys Glu Asn Met Cys Val Leu Pro Phe Pro Val Lys Thr Ser 35 40 45 Gly Arg Ser Leu Thr Gly Ser Ala Trp Ser Arg Phe His Leu Pro Cys 50 55 His Leu Arg Pro Gly Asp Arg Leu Pro Cys His Cys Leu Gly Lys Phe 70 · **75** Arg Lys Arg Val Ala Lys Trp Cys Ile Arg Lys Asn Met Ala Arg Ser 85 90 Pro His Leu Leu Gly Gly Arg Pro Asn Ser Thr Ser Gly Pro Leu Cys 100 105 110 Asp Phe Pro Ala Pro Ser Lys Gln Val Thr Pro Leu Leu Trp Val Ser 115 120 125 Val Ser Leu Pro Ile Lys * 134

<210> 1616 <211> 60 <212> PRT <213> Homo sapiens

<210> 1617 <211> 49 <212> PRT <213> Homo sapiens

<210> 1618 <211> 95 <212> PRT <213> Homo sapiens

<400> 1618 Met Trp Thr Val Leu Trp His Arg Phe Ser Met Val Leu Arg Leu Pro 10 Glu Glu Ala Ser Ala Gln Glu Gly Glu Leu Ser Leu Ser Pro Pro 25 Ser Pro Glu Pro Asp Trp Thr Leu Ile Ser Pro Gln Gly Met Ala Ala 40 45 Leu Leu Ser Leu Ala Met Ala Thr Phe Thr Gln Glu Pro Gln Leu Cys 55 60 Leu Ser Cys Leu Ser Gln His Gly Ser Ile Leu Met Ser Ile Leu Lys 70 75 His Leu Leu Cys Pro Ser Phe Leu Asn Gln Leu Arg Gln Ala * 90

<210> 1619 <211> 54 <212> PRT <213> Homo sapiens

<210> 1620 <211> 71 <212> PRT <213> Homo sapiens

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<210> 1621
    <211> 90
     <212> PRT
     <213> Homo sapiens
    <221> misc feature
    <222> (1)...(90)
    <223> Xaa = any amino acid or nothing
    <400> 1621
Met Asp His Lys Ser Leu Trp Ala Gly Val Glu Val Leu Leu Leu
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Gln Gly Gly Ser Ala Tyr Lys Leu Val Cys Tyr Phe Thr Asn Trp Ser
           20
                              25
Gln Asp Arg Gln Glu Pro Gly Lys Phe Thr Pro Glu Asn Ile Asp Pro
       35
                                      45
                          40
Phe Leu Cys Ser His Leu Ile Tyr Ser Phe Ala Ser Ile Glu Asn Asn
              55
                                   60
Lys Val Ile Ile Arg Thr Pro Xaa Phe Phe Pro Leu Pro Leu Gly His
                  70 ·
Arg Leu Gln Thr Ile Asn Pro Arg Leu
               85
                              89
    <210> 1622
    <211> 53
    <212> PRT
    <213> Homo sapiens
    <400> 1622
Met Gln Cys Ala Ile Cys Ile Leu Leu Tyr Leu Leu Asn Lys Lys Thr
               5
                                  10
Val Trp Arg Cys Ser Arg Ile His His Asn Asn Thr Val Val Leu Thr
        20
                              25
Arg Glu Ser Ser Pro Phe Leu Thr Thr Cys Thr Leu Ser Ser Val Leu
     35
                           40
                                              45
Leu Thr Lys Ala *
    50 . 52
    <210> 1623
    <211> 978
    <212> PRT
    <213> Homo sapiens
    <400> 1623
Met Pro Ala Arg Arg Leu Leu Leu Leu Thr Leu Leu Pro Gly
                                  10
Leu Gly Ile Phe Gly Ser Thr Ser Thr Val Thr Leu Pro Glu Thr Leu
                              25
Leu Phe Val Ser Thr Leu Asp Gly Ser Leu His Ala Val Ser Lys Arg
       35
                           40
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Thr Gly Ser Ile Lys Trp Thr Leu Lys Glu Asp Pro Val Leu Gln Val Pro Thr His Val Glu Glu Pro Ala Phe Leu Pro Asp Pro Asn Asp Gly Ser Leu Tyr Thr Leu Gly Ser Lys Asn Asn Glu Gly Leu Thr Lys Leu 85 90 Pro Phe Thr Ile Pro Glu Leu Val Gln Ala Ser Pro Cys Arg Ser Ser 100 105 Asp Gly Ile Leu Tyr Met Gly Lys Lys Gln Asp Ile Trp Tyr Val Ile 120 125 Asp Leu Leu Thr Gly Glu Lys Gln Gln Thr Leu Ser Ser Ala Phe Ala 135 140 Asp Ser Leu Cys Pro Ser Thr Ser Leu Leu Tyr Leu Gly Arg Thr Glu 150 155 Tyr Thr Ile Thr Met Tyr Asp Thr Lys Thr Arg Glu Leu Arg Trp Asn 165 170 Ala Thr Tyr Phe Asp Tyr Ala Ala Ser Leu Pro Glu Asp Asp Val Asp 185 180 Tyr Lys Met Ser His Phe Val Ser Asn Gly Asp Gly Leu Val Val Thr 200 Val Asp Ser Glu Ser Gly Asp Val Leu Trp Ile Gln Asn Tyr Ala Ser 215 220 Pro Val Val Ala Phe Tyr Val Trp Gln Arg Glu Gly Leu Arg Lys Val 230 235 Met His Ile Asn Val Ala Val Glu Thr Leu Arg Tyr Leu Thr Phe Met 245 250 Ser Gly Glu Val Gly Arg Ile Thr Lys Trp Lys Tyr Pro Phe Pro Lys 260 . 265 Glu Thr Glu Ala Lys Ser Lys Leu Thr Pro Thr Leu Tyr Val Gly Lys 280 Tyr Ser Thr Ser Leu Tyr Ala Ser Pro Ser Met Val His Glu Gly Val 295 300 Ala Val Val Pro Arg Gly Ser Thr Leu Pro Leu Leu Glu Gly Pro Gln 310 315 Thr Asp Gly Val Thr Ile Gly Asp Lys Gly Glu Cys Val Ile Thr Pro 330 Ser Thr Asp Val Lys Phe Asp Pro Gly Leu Lys Ser Lys Asn Lys Leu 345 Asn Tyr Leu Arg Asn Tyr Trp Leu Leu Ile Gly His His Glu Thr Pro 360 Leu Ser Ala Ser Thr Lys Met Leu Glu Arg Phe Pro Asn Asn Leu Pro 375 Lys His Arg Glu Asn Val Ile Pro Ala Asp Ser Glu Lys Lys Ser Phe 395 Glu Glu Val Ile Asn Leu Val Asp Gln Thr Ser Glu Asn Ala Pro Thr 405 410 Thr Val Ser Arg Asp Val Glu Glu Lys Pro Ala His Ala Pro Ala Arg 425 Pro Glu Ala Pro Val Asp Ser Met Leu Lys Asp Met Ala Thr Ile Ile 440 Leu Ser Thr Phe Leu Leu Ile Gly Trp Val Ala Phe Ile Ile Thr Tyr 455 460 Pro Leu Ser Met His Gln Gln Gln Leu Gln His Gln Gln Phe Gln 470 475 Lys Glu Leu Glu Lys Ile Gln Leu Leu Gln Gln Gln Gln Gln Leu 485 490 Pro Phe His Pro Pro Gly Asp Thr Ala Gln Asp Gly Glu Leu Leu Asp 500 . 505 Thr Ser Gly Pro Tyr Ser Glu Ser Ser Gly Thr Ser Ser Pro Ser Thr

		515					520					525			
Ser	Pro		Ala	Ser	Asn	His		Leu	Cvs	Ser	Glv	_	Ser	Ala	Ser
	530	5				535			-1-	-	540				
Lys	Ala	Gly	Ser	Ser	Pro	Ser	Leu	Glu	Gln	Asp	Asp	Gly	Asp	Glu	Glu
545	_		-		550		_		_	555	_	_	_	_	560
			Val	565		-			570					575	
Leu	Gly	His	Gly 580	Ala	Glu	Gly	Thr	Ile 585	Val	Tyr	Arg	Gly	Met 590	Phe	Asp
Asn	Arg	Asp 595	Val	Ala	Val	ràs	Arg 600	Ile	Leu	Pro	Glu	Сув 605	Phe	Ser	Phe
Ala	Asp 610	Arg	Glu	Val	Gln	Leu 615	Leu	Arg	Glu	Ser	Asp 620	Glu	His	Pro	Asn
Val 625	Ile	Arg	Tyr	Phe	Cys 630	Thr	Glu	Lys	qaA	Arg 635	Gln	Phe	Gln	Tyr	Ile 640
Ala	Ile	Glu	Leu	Cys 645	Ala	Ala	Thr	Leu	Gln 650	Glu	Tyr	Val	Glu	Gln 655	Lys
qaA	Phe	Ala	His 660	Leu	Gly	Leu	Glu	Pro 665	Ile	Thr	Leu	Leu	Gln 670	Gln	Thr
Thr	Ser	Gly 675	Leu	Ala	His	Leu	His 680	Ser	Leu	Asn	Ile	Val 685	His	Arg	Asp
Leu	Lys 690	Pro	His	Asn	Ile	Leu 695	Ile	Ser	Met	Pro	Asn 700	Ala	His	Gly	Lys
Ile 705	Lys	Ala	Met	Ile	Ser 710	Asp	Phe	Gly	Leu	Trp 715	Lys	Lys	Leu	Ala	Val 720
Gly	Arg	His	Ser	Phe 725	Ser	Arg	Arg	Ser	Gly 730	Val	Pro	Gly	Thr	Glu 735	Gly
Trp	Ile	Ala	Pro 740	Glu	Met	Leu	Ser	Glu 745	Asp	Cys	Lys	Glu	Asn 750	Pro	Thr
Tyr	Thr	Val 755	Asp	Ile	Phe	Ser	Ala 760	Gly	Cys	Val	Phe	Tyr 765	Tyr	Val 	Ile
Ser	Glu 770	Gly	Ser	His	Pro	Phe 775	Gly	Lys	Ser	Leu	Gln 780	Arg	Gln	Ala	Asn
Ile 785	Leu	Leu	Gly	Ala	Cys 790	Ser	Leu	Asp	Cys	Leu 795	His	Pro	Glu	Lys	His 800
Glu	Asp	Val	Ile	Ala 805	Arg	Glu	Leu	Ile	Glu 810	Lys	Met	Ile	Ala	Met 815	Asp
Pro	Gln	Lys	Arg 820	Pro	Ser	Ala	Lys	His 825	Val	Leu	Lys	His	Pro 830	Phe	Phe
Trp	Ser	Leu 835	Glu	Lys	Gln	Leu	Gln 840	Phe	Phe	Gln	qaA	Val 845	Ser	Asp	Arg
Ile	Glu 850	Lys	Glu	Ser	Leu	Asp 855	Gly	Pro	Ile	Val	Lys 860	Gln	Leu	Glu	Arg
Gly 865	Gly	Arg	Ala	Val	Val 870	Lys	Met	Asp	Trp	Arg 875	Glu	Asn	Ile	Thr	Val 880
Pro	Leu	Gln	Thr	Asp 885	Leu	Arg	ГÀг	Phe	Arg 890	Thr	Tyr	Lys	Gly	Gly 895	Ser
Val	Arg	Asp	Leu 900	Leu	Arg	Ala	Met	Arg 905	Asn	Lys	Lys	His	His 910	Tyr	Arg
Glu	Leu	Pro 915	Ala	Glu	Val	Arg	Glu 920	Thr	Leu	Gly	Thr	Leu 925	Pro	Asp	Asp
Phe	Val 930	Сув	Tyr	Phe	Thr	Ser 935	Arg	Phe	Pro	His	Leu 940	Leu	Ala	His	Thr
	Arg	Ala	Met	Glu		Cys	Ser	His	Glu		Leu	Phe	Gln	Pro	
945 Tyr	Phe	His	Glu		950 Pro	Glu	Pro	Gln		955 Pro	Val	Thr	Pro	_	960 Ala
Leu	*			965					970					975	
977															

<210> 1624 <211> 56 <212> PRT <213> Homo sapiens

<210> 1625 <211> 146 <212> PRT <213> Homo sapiens

<400> 1625 Met Glu Leu Ala Leu Cys Gly Leu Val Val Met Ala Gly Val Ile 10 Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys Met Val Lys Gln Val 20 25 Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro Tyr Gly Cys His Cys 40 Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala Thr Asp Trp Cys Cys 55 60 Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys Thr Gln Gly Cys Gly 65 70 75 80 70 75 Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe Ser Gln Gly Asn Ile His 85 .90 Cys Ser Asp Lys Gly Ser Trp Cys Glu Gln Gln Leu Cys Ala Cys Asp 100 105 Lys Glu Val Ala Phe Cys Leu Lys Arg Asn Leu Asp Thr Tyr Gln Lys 115 120 125 Arg Leu Arg Phe Tyr Trp Arg Pro His Cys Arg Gly Gln Thr Pro Gly 135 130 Cys * 145

<210> 1626 <211> 385 <212> PRT <213> Homo sapiens

<400> 1626
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly

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10
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln
                           25
          20
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
                    40
Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
                    55
Glu Trp Val Ser Gly Ile Gly Gly Ser Gly Ser Ser Thr Tyr Tyr Ala
                 70
                                  75
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Gln Asn
             85
                              90
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
         100 . 105
Tyr Tyr Cys Ala Lys Ser His Pro Ala Tyr Tyr Tyr Gly Ser Gly Ser
     115 120
Tyr Ser Ser His Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln
                  135
                           140
Gly Thr Thr Val Thr Val Ser Ser Gly Asp Gly Ser Ser Gly Gly Ser
145 , 150 155
Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr
          165
                             170
                                              175
Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser
         180
                           185
Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly
                       200
                                       205
Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly
                                    220
                   215
Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
                                 235
225 230
Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
                            250 255
Gln Tyr Gly Ser Ser Pro Thr Thr Phe Gly Gln Gly Thr Lys Val Glu
        260 265
                                 270
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
     275 280 285
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
                   295
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
                310
                                 315
Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
            325 330
Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
         340
                          345
Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Ser Gly Ala
                      360
Leu Ser Phe Ala Arg Ser Gln Arg Ser Phe Gln Pro Gly Glu Ser Val
                    375
                                     380
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<210> 1627

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1627

Met Ile Val His Cys Thr Ile Ile Pro Leu Ser Phe Cys Val His Arg 10 Leu Arg Ala Pro Leu Asp Ala Tyr Phe Gln Val Ser Arg Thr Gln Pro 25 20 Asp Leu Pro Ala Thr Thr Tyr Asp Ser Glu Thr Arg Asn Pro Val Ser 35 40 45 Glu Glu Leu Gln Val Ser Ser Ser Ser Asp Ser Asp Ser Asp Ser Ser 55 60 Ala Glu Tyr Gly Gly Val Val Asp Gln Ala Glu Glu Ser Gly Ala Val 75 Ile Leu Glu Gly Gln Tyr Phe Thr Gln Val Trp Thr His Lys Ala Asn 90 Ile His Glu Ala 100

<210> 1628 <211> 71 <212> PRT <213> Homo sapiens

<210> 1629 <211> 112 <212> PRT <213> Homo sapiens

<400> 1629 Met Ala His Tyr Lys Thr Glu Gln Asp Asp Trp Leu Ile Ile Tyr Leu . 1 5 . 10 Lys Tyr Leu Leu Phe Val Phe Asn Phe Phe Phe Trp Val Gly Gly Ala 20 25 Ala Val Leu Ala Val Gly Ile Trp Thr Leu Val Glu Lys Ser Gly Tyr 40 Leu Ser Val Leu Ala Ser Ser Thr Phe Ala Ala Ser Ala Tyr Ile Leu 55 60 Ile Phe Ala Gly Val Leu Val Met Val Thr Gly Phe Leu Gly Phe Gly 75 70 Ala Ile Leu Trp Glu Arg Lys Gly Cys Leu Ser Thr Tyr Phe Cys Leu 85 90 Leu Leu Val Ile Phe Leu Asp Glu Leu Glu Ala Gly Val Leu Ala His 100

<210> 1630 <211> 47 <212> PRT <213> Homo sapiens

Arg Phe Val Trp Val Ser Met Pro Glu Leu Ile Gly Ala Ser * 35 40 45 46

<210> 1631 <211> 79 <212> PRT <213> Homo sapiens

<400> 1631 Met Tyr Met Trp Ser Gly Leu Leu Gly Ser Lys Trp Thr Leu Val Tyr 10 5 Ser His Phe Leu Asn Met Ala Pro Ala Ser Phe Ser His Tyr Gln Ala 20 25 Ser Leu Pro Leu Leu Glu His Asp Thr Leu Ser Ser Ser Arg Val His 35 40 Ser Tyr Gln Cys Pro Gly Phe Phe Cys Phe Phe Pro Ser Val Leu Glu . 60 . 50 55 Phe Ser Gln Leu Gln Lys Thr Tyr Ser Leu Cys Leu Pro Phe * 70 75

<210> 1632 <211> 48 <212> PRT <213> Homo sapiens

<210> 1633 <211> 58 <212> PRT

<213> Homo sapiens

<210> 1634 <211> 55 <212> PRT <213> Homo sapiens

<210> 1635 <211> 78 <212> PRT <213> Homo sapiens

<400> 1635 Met Ala Val Val Gln Ala Leu Thr Pro Leu Val Ser Ala Ala Ala Thr 1 5 10 15 Ala Ser Cys Leu Thr Ser Cys Ser Trp Ser Leu Thr Phe Pro Glu His 20 25 30 Ser Val Asn Tyr Gln Ser His Pro Ser Glu Thr Gln Pro Tyr Leu Leu 40 45 Arg Ser Thr Lys Glu Lys His His His Trp Leu Thr Ala Lys Ala Thr 55 60 Cys Pro Ala Ala Gly Ala Glu Gly Leu Pro Ser Arg Gly * 70 75 77

<210> 1636 <211> 51 <212> PRT <213> Homo sapiens

<210> 1637 <211> 123 <212> PRT <213> Homo sapiens

<400> 1637 Met Gln Gln Met Met Trp Ala Gly Leu Leu Cys Pro Gln Leu Glu Trp 5 10 Leu Gln Gly Arg Ala Cys Arg Pro Cys Gly Leu Leu Ala Ser Asp Ala Ala Ala Leu Trp Phe Arg Gly Gly Ile Ser Ala Trp Glu Asp Ser Cys 35 40 Ala Val Ser Asn Ile Arg His Glu Ala Tyr Asn Cys His Leu Ser Val 55 60 Phe Leu Asn Arg Cys Ala Asn Glu Leu Thr Val Gln Phe Leu Ile Ile 70 75 Leu Ala Phe Gln Ile Met Leu Ser Cys Ala Val Ile Ala Pro Ala Val 85 90 Pro Val Phe Gln Arg Leu Thr Leu Lys Arg Ser Gly Arg Thr Ser Leu 100 105 Gly Ser Thr Gly Arg Leu His Phe Cys Lys * 120 122

<210> 1638 <211> 69 <212> PRT <213> Homo sapiens

<400> 1638 Met Lys Arg Leu Arg Phe Val Leu Arg Val Phe Gln Met Thr Ala Phe 10 Ile Thr Gly Ala His Thr Ile Thr Asn Tyr Ser Asp Arg Leu Tyr 20 25 Ile Ser Pro Leu Ser His Phe Phe Met Asn Ser Gly Ser Ser Ala Gln 35 40 45 Ser Val Leu Ser His Ser Tyr Val Ser Gln Ile Phe Phe Lys Asn Val 50 55 Ser Lys Tyr Phe * 65 68

<210> 1639

<211> 92 <212> PRT <213> Homo sapiens

<210> 1640 <211> 58 <212> PRT <213> Homo sapiens

<210> 1641 <211> 459 <212> PRT <213> Homo sapiens

<400> 1641 Met Ser Asp Leu Leu Ser Val Phe Leu His Leu Leu Leu Phe Lys 1 5 10 Leu Val Ala Pro Val Thr Phe Arg His His Arg Tyr Asp Asp Leu Val 20 25 Arg Thr Leu Tyr Lys Val Gln Asn Glu Cys Pro Gly Ile Thr Arg Val 40 Tyr Ser Ile Gly Arg Ser Val Glu Gly Arg His Leu Tyr Val Leu Glu 55 Phe Ser Asp His Pro Gly Ile His Glu Pro Leu Glu Pro Glu Val Lys 75 Tyr Val Gly Asn Met His Gly Asn Glu Ala Leu Gly Arg Glu Leu Met 90 Leu Gln Leu Ser Glu Phe Leu Cys Glu Glu Phe Arg Asn Arg Asn Gln

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105
          100
Arg Ile Val Gln Leu Ile Gln Asp Thr Arg Ile His Ile Leu Pro Ser
              120
                                     125
Met Asn Pro Asp Gly Tyr Glu Val Ala Ala Ala Gln Gly Pro Asn Lys
                 135
Pro Gly Tyr Leu Val Gly Arg Asn Asn Ala Asn Gly Val Asp Leu Asn
       150
                                155
Arg Asn Phe Pro Asp Leu Asn Thr Tyr Ile Tyr Tyr Asn Glu Lys Tyr
            165 170 175
Gly Gly Pro Asn His His Leu Pro Leu Pro Asp Asn Trp Lys Ser Gln
         180 185
Val Glu Pro Glu Thr Arg Ala Val Ile Arg Trp Met His Ser Phe Asn
                      200 . 205
Phe Val Leu Ser Ala Asn Leu His Gly Gly Ala Val Val Ala Asn Tyr
       215
                                   220
Pro Tyr Asp Lys Ser Phe Glu His Arg Val Arg Gly Val Arg Arg Thr
     230 235
Ala Ser Thr Pro Thr Pro Asp Asp Lys Leu Phe Gln Lys Leu Ala Lys
                    250
            245
Val Tyr Ser Tyr Ala His Gly Trp Met Phe Gln Gly Trp Asn Cys Gly
                          265
Asp Tyr Phe Pro Asp Gly Ile Thr Asn Gly Ala Ser Trp Tyr Ser Leu
     275
                     280
                                     285
Ser Lys Gly Met Gln Asp Phe Asn Tyr Leu His Thr Asn Cys Phe Glu
                                   300
                   295
Ile Thr Leu Glu Leu Ser Cys Asp Lys Phe Pro Pro Glu Glu Glu Leu
               310
                                315
Gln Arg Glu Trp Leu Gly Asn Arg Glu Ala Leu Ile Gln Phe Leu Glu
            325
                            330
Gln Val His Gln Gly Ile Lys Gly Met Val Leu Asp Glu Asn Tyr Asn
   340
                         345
Asn Leu Ala Asn Ala Val Ile Ser Val Ser Gly Ile Asn His Asp Val
                      360
Thr Ser Gly Asp His Gly Asp Tyr Phe Arg Leu Leu Pro Gly Ile
                    375
                                    380
Tyr Thr Val Ser Ala Thr Ala Pro Gly Tyr Asp Pro Glu Thr Val Thr
                390
                                395
Val Thr Val Gly Pro Ala Glu Pro Thr Leu Val Asn Phe His Leu Lys
            405 410 415
Arg Ser Ile Pro Gln Val Ser Pro Val Arg Arg Ala Pro Ser Arg Arg
         420
                         425
His Gly Val Arg Ala Lys Val Gln Pro Gln Pro Arg Lys Lys Glu Met
                     440
Glu Met Arg Gln Leu Gln Arg Gly Pro Ala *
                   455
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<210> 1642 <211> 144 <212> PRT <213> Homo sapiens

Leu Val Thr Leu His Met Leu Cys Ser Ile Pro Leu Ser Gly Arg 40 Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn Asp Ile Ile Asp Ile Leu 60 55 Leu Thr Phe Thr Gln Gly Val Asn Glu Lys Leu Thr Ile Ser Glu Glu 70 75 Thr Leu Ala Asn Asn Thr Trp Ser Leu Met Leu Lys Glu Val Leu Ser 90 85 Ser Ile Leu Lys Val Pro Glu Gly Phe Phe Ser Gly Leu Ile Leu Leu 100 105 Ser Glu Leu Leu Pro Leu Pro Leu Pro Met Gln Thr Thr Gln Val Ser 115 120 125 Leu Pro Tyr Asn Met His Leu Ile Asn Asp Cys Ser Asn Thr Phe * 135

<210> 1643 <211> 70 <212> PRT <213> Homo sapiens

<210> 1644 <211> 82 <212> PRT <213> Homo sapiens

<210> 1645 <211> 256 <212> PRT <213> Homo sapiens

<400> 1645 Met Ala Ala Leu Thr Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala 10 Leu Ala Gly Asp Thr Gln Pro Arg Phe Leu Trp Gln Gly Lys Tyr Lys 25 Cys His Phe Phe Asn Gly Thr Glu Arg Val Gln Phe Leu Glu Arg Leu Phe Tyr Asn Gln Glu Glu Phe Val Arg Phe Asp Ser Asp Val Gly Glu 55 Tyr Arg Ala Val Thr Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn Ser Gln Lys Asp Ile Leu Glu Asp Arg Arg Gly Gln Val Asp Thr Val 85 90 Cys Arg His Asn Tyr Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg 105 Val His Pro Glu Val Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln 120 125 His His Asn Leu Leu Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser 135 Ile Glu Val Arg Trp Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val 150 155 Val Ser Thr Gly Leu Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu 165 170 Val Met Leu Glu Thr Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln 185 Val Glu His Pro Ser Val Met Ser Pro Leu Thr Val Glu Trp Arg Ala 200 Arg Ser Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Val Gly Phe 210 215 220 Val Leu Gly Leu Leu Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg 230 235 240 Asn Gln Lys Gly His Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser *

<210> 1646 <211> 263 <212> PRT <213> Homo sapiens

Asp Asp Gly Arg Arg Lys Pro Gly Ile Gly Gly Arg Glu Arg Trp Asn 85 90 His Val Thr Thr Thr Lys Arg Pro Val Thr Thr Arg Ala Pro Ala 105 Asn Thr Leu Gly Asn Asp Phe Asp Leu Ala Asp Ala Leu Asp Asp Arg 120 125 Asn Asp Arg Asp Asp Gly Arg Arg Lys Pro Ile Ala Gly Gly Gly 135 140 Phe Ser Asp Lys Asp Leu Glu Asp Ile Val Gly Gly Glu Tyr Lys 150 155 Pro Asp Lys Gly Lys Gly Asp Gly Arg Tyr Gly Ser Asn Asp Asp Pro 170 165 Gly Ser Gly Met Val Ala Glu Pro Gly Thr Ile Ala Gly Val Ala Ser 185 Ala Leu Ala Met Ala Leu Ile Gly Ala Val Ser Ser Tyr Ile Ser Tyr 200 205 Gln Gln Lys Lys Phe Cys Phe Ser Ile Gln Gln Gly Leu Asn Ala Asp 215 220 Tyr Val Lys Gly Glu Asn Leu Glu Ala Val Val Cys Glu Glu Pro Gln 235 230 Val Lys Tyr Ser Thr Leu His Thr Gln Ser Ala Glu Pro Pro Pro 245 Pro Glu Pro Ala Arg Ile * 260 262

<210> 1647 <211> 74 <212> PRT <213> Homo sapiens

<210> 1648 <211> 58 <212> PRT <213> Homo sapiens

35 40 45 Asn Ala Met Thr Gly Gly Phe Trp Val * 50 55 57

<210> 1649 <211> 90 <212> PRT <213> Homo sapiens

<400> 1649 Met Gly Val Leu Leu Val Ser Met Val Val Leu Phe Ile Phe Ala Ile 5 Leu Cys Ile Phe Ile Arg Asn Arg Ile Leu Glu Ile Val Tyr Ala Ser 20 25 Leu Gly Ala Leu Leu Phe Thr Cys Phe Leu Ala Val Asp Thr Gln Leu , 35 40 45 Leu Leu Gly Asn Lys Gln Leu Ser Leu Ser Pro Glu Glu Tyr Val Phe 55 60 Ala Ala Leu Asn Leu Tyr Thr Asp Ile Ile Asn Ile Phe Leu Tyr Ile 70 75 Leu Thr Ile Ile Gly Arg Ala Lys Glu * 85 89

<210> 1650 <211> 113 <212> PRT

<213> Homo sapiens

<400> 1650 Met Ala Leu Gly Val Pro Ile Ser Val Tyr Leu Leu Phe Asn Ala Met 10 Thr Ala Leu Thr Glu Glu Ala Ala Val Thr Val Thr Pro Pro Ile Thr 20 . 25 Ala Gln Gln Gly Asn Trp Thr Val Asn Lys Thr Glu Ala Asp Asn Ile 45 40 Glu Gly Pro Ile Ala Leu Lys Phe Ser His Leu Cys Leu Glu Asp His 55 60 50 Asn Ser Tyr Cys Ile Asn Gly Ala Cys Ala Phe His His Glu Leu Glu 70 75 Lys Ala Ile Cys Arg Cys Phe Thr Gly Tyr Thr Gly Glu Arg Cys Leu 85 90 Lys Leu Lys Ser Pro Tyr Asn Val Cys Ser Gly Glu Arg Arg Pro Leu 100 105

<210> 1651 <211> 50 <212> PRT <213> Homo sapiens

<210> 1652 <211> 121 <212> PRT <213> Homo sapiens

<400> 1652 Met Ser Arg Ala Gly Met Leu Gly Val Val Cys Ala Leu Leu Val Trp 10 Ala Tyr Leu Ala Val Gly Lys Leu Val Val Arg Met Thr Phe Thr Glu 25 Leu Cys Thr His His Pro Trp Ser Leu Arg Cys Glu Ser Phe Cys Arg 40 Ser Arg Val Thr Ala Cys Leu Pro Ala Pro Ala Pro Trp Leu Arg Pro 55 Phe Leu Cys Pro Met Leu Phe Ser Asp Arg Asn Pro Val Glu Cys His 75 80 70 Leu Phe Gly Glu Ala Val Ser Asp Pro Val Cys Lys Gly Leu Leu Pro 85 90 His Tyr Phe Trp His Pro Thr Phe Phe Pro Val Lys Ala Asn Cys Leu 105 100 Val Ser Phe Cys Pro Thr Thr Val *

<210> 1653 <211> 111 <212> PRT <213> Homo sapiens

100 105 110

<210> 1654 <211> 150 <212> PRT <213> Homo sapiens

<400> 1654 Met Trp Ile Cys Arg Val Lys Gln Ala Trp Leu Pro Pro Leu Leu Ser 5 10 Pro Leu Gly Pro Pro Thr Pro Trp Asp Pro Phe Tyr Ala Ala Pro Ser 25 Pro Pro Val Trp Val Gly Ser Gly Tyr Trp Tyr Arg Gly Leu Leu Ser 40 Pro Pro Asp Gly Gly Gln Gly Ser Phe Pro Pro His Leu Cys Pro Gln 55 60 Cys Pro Val Gln Ala Gln Ala Gln Ile Gly Pro Tyr Phe Arg Glu Leu 70 75 Gly Glu Pro Pro Ser Glu Thr Lys Trp Tyr Leu Asn Ser His Ser His 85 90 His Arg Ala Ala Gly Thr Gln Arg Arg Leu Arg Cys Leu Gln His Leu 100 105 110 Leu Gly Gly Gly Pro Gly Ile Gly Ser Glu Ser Pro Asn Glu Gly 120 125 Pro Gly Gln Val Thr His Ala Cys Asn Leu Ser Thr Leu Gly Gly Lys 130 135 Asp Val Arg Ile Thr 149

<210> 1655 <211> 68 <212> PRT <213> Homo sapiens

<210> 1656 <211> 61 <212> PRT <213> Homo sapiens

<210> 1657 <211> 80 <212> PRT <213> Homo sapiens

<210> 1658 <211> 160 <212> PRT <213> Homo sapiens

<400> 1658 Met Ala Phe Leu Leu Tyr His Leu Val Tyr His Ile Pro Pro Met Ala 5 10 Pro Val Ser Phe Val Phe Glu Thr Lys Ser Arg Ser Ala Ala Gln Ala 25 Gly Val Gln Trp His Asp Pro Gly Ser Pro Gln Pro Leu Pro Pro Arg 45 40 Phe Lys Arg Phe Ser Cys His Gly Leu Asn Ile Lys Phe Ala Phe Phe 55 Ser His Leu Lys Glu Leu His Leu Asp Ser Gly His Cys Phe Ile Phe 70 Ile Arg Leu Val Lys Gly Ala Val Cys Leu Ile His Val Gln Ile Arg 90 Ile Pro Ser Ala Asp Glu Asp Ile Thr Ile Leu Phe Phe Ile Val Ser 105 110 Lys His Phe Leu Glu Ser Val Phe Lys Met Leu Gln Trp Ser Gln Met 125 120 Thr Leu Ala Thr Val Lys Thr Thr Phe Ile Gly Leu Asn Glu Phe Ile 135 Cys Ser Pro Ser Thr Leu Pro Ser Gly Lys Lys Asn Gly Leu Ile *

145 150 155 159

<210> 1659 <211> 90 <212> PRT <213> Homo sapiens

<210> 1660

<211> 56

<212> PRT <213> Homo sapiens

85 89

<210> 1661 <211> 74 <212> PRT <213> Homo sapiens

Asp Gly Thr Glu Gly His Tyr Pro Lys * 65 70 73

<210> 1662 <211> 271 <212> PRT <213> Homo sapiens

<400> 1662 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 10 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 25 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 40 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser 55 60 Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser 70 75 Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Val Leu 90 Ala Arg Val Gln Ala Leu Gly Trp His Gly Pro Leu Leu Ala Leu Ser 105 100 Phe Leu Ala Phe Trp Val Pro Trp Ala Pro Ala Gly Leu Gln Phe Leu 120 125 Leu Cys Leu Cys Leu Tyr Asp Gly Phe Leu Thr Leu Val Asp Leu His 135 His His Ala Leu Leu Ala Asp Leu Ala Leu Ser Ala His Asp Arg Thr 150 155 His Leu Asn Phe Tyr Cys Ser Leu Phe Ser Ala Ala Gly Ser Leu Ser 165 170 175 Val Phe Ala Ser Tyr Ala Phe Trp Asn Lys Glu Asp Phe Ser Ser Phe 180 185 190 Arg Ala Phe Cys Val Thr Leu Ala Val Ser Ser Gly Leu Gly Phe Leu 200 Gly Ala Thr Gln Leu Leu Arg Arg Arg Val Glu Ala Ala Arg Lys Asp 215 Pro Gly Cys Ser Gly Leu Val Val Asp Ser Gly Leu Cys Gly Glu Glu 230 235 Leu Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr 245 250 255 Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Cys Phe Ser *

<210> 1663 <211> 53 <212> PRT <213> Homo sapiens

20 25 30

Lys Tyr Asn Thr Ser Ser Glu Tyr Leu Ser Glu Leu Asp Thr Glu Ala
35 40 45

Ser Arg Val Ser *
50 52

<210> 1664 <211> 271 <212> PRT <213> Homo sapiens

<400> 1664 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 10 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 20 25 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 35 40 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser 55 Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser 70 75 Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Val Leu 90 85 Ala Arg Val Gln Ala Leu Gly Trp His Gly Pro Leu Leu Ala Leu Ser 105 110 Phe Leu Ala Phe Trp Val Pro Trp Ala Pro Ala Gly Leu Gln Phe Leu 120 Leu Cys Leu Cys Leu Tyr Asp Gly Phe Leu Thr Leu Val Asp Leu His 130 135 140 His His Ala Leu Leu Ala Asp Leu Ala Leu Ser Ala His Asp Arg Thr 145 150 155 His Leu Asn Phe Tyr Cys Ser Leu Phe Ser Ala Ala Gly Ser Leu Ser 170 165 Val Phe Ala Ser Tyr Ala Phe Trp Asn Lys Glu Asp Phe Ser Ser Phe 185 Arg Ala Phe Cys Val Thr Leu Ala Val Ser Ser Gly Leu Gly Phe Leu 195 200 Gly Ala Thr Gln Leu Leu Arg Arg Arg Val Glu Ala Ala Arg Lys Asp 215 220 Pro Gly Cys Ser Gly Leu Val Val Asp Ser Gly Leu Cys Gly Glu Glu 230 235 Leu Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr 245 250 Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Cys Phe Ser * 265

<210> 1665 <211> 284 <212> PRT <213> Homo sapiens

<400> 1665

Met Asp Glu Lys Ser Asn Lys Leu Leu Leu Ala Leu Val Met Leu Phe 10 Leu Phe Ala Val Ile Val Leu Gln Tyr Val Cys Pro Gly Thr Glu Cys 20 25 Gln Leu Leu Arg Leu Gln Ala Phe Ser Ser Pro Val Pro Asp Pro Tyr 40 Arg Ser Glu Asp Glu Ser Ser Ala Arg Phe Val Pro Arg Tyr Asn Phe 55 Thr Arg Gly Asp Leu Leu Arg Lys Val Asp Phe Asp Ile Lys Gly Asp 70 Asp Leu Ile Val Phe Leu His Ile Gln Lys Thr Gly Gly Thr Thr Phe 90 Gly Arg His Leu Val Arg Asn Ile Gln Leu Glu Gln Pro Cys Glu Cys 100 105 Arg Val Gly Gln Lys Lys Cys Thr Cys His Arg Pro Gly Lys Arg Glu 125 120 115 Thr Trp Leu Phe Ser Arg Phe Ser Thr Gly Trp Ser Cys Gly Leu His 135 Ala Asp Trp Thr Glu Leu Thr Ser Cys Val Pro Ser Val Gly Asp Gly 155 150 Lys Arg Asp Ala Arg Leu Arg Pro Ser Arg Trp Arg Ile Phe His Ile 165 170 175 Leu Tyr Ala Ala Cys Thr Asp Ile Arg Gly Ser Pro Asn Thr Asn Ala 185 Gly Ala Asn Ser Pro Ser Phe Thr Lys Thr Arg Asn Thr Ser Lys Ser 195 200 Trp Lys Asn Phe His Tyr Ile Thr Ile Leu Gln Asp Pro Gly Ala Arg 215 220 Ser Leu Ser Glu Trp Arg Pro Val Leu Lys Arg Gly Thr Leu Glu Gly 230 . 235 Leu Leu Ala Cys Trp Pro Trp Lys Ala Pro Pro Pro Leu Lys Lys Leu 245 250 Ser Thr Trp Tyr Pro Gly Glu Glu Leu Val Trp Leu Ala Pro Leu Gln 260 265 Lys Ile Ile Gly Leu Ala Leu Leu Ile Tyr Pro * 280

<210> 1666 <211> 67 <212> PRT <213> Homo sapiens

<210> 1667 <211> 79 <212> PRT <213> Homo sapiens

<210> 1668 <211> 54 <212> PRT <213> Homo sapiens

(213) HOMO Bapiens

<210> 1669 <211> 119 <212> PRT <213> Homo sapiens

<400> 1669 Met Met Ala Gly Ile Arg Ala Leu Phe Met Tyr Leu Trp Leu Gln Leu 10 Asp Trp Val Ser Arg Gly Glu Ser Val Gly Leu His Leu Pro Thr Leu 25 Ser Val Gln Glu Gly Asp Asn Ser Ile Ile Asn Cys Ala Tyr Ser Asn 40 Ser Ala Ser Asp Tyr Phe Ile Trp Tyr Lys Gln Glu Ser Gly Lys Gly 55 Pro Gln Phe Ile Ile Asp Ile Arg Ser Asn Met Asp Lys Arg Gln Gly 75 70 Gln Arg Val Thr Val Leu Leu Asn Lys Thr Val Lys His Leu Ser Leu 85 90 Gln Ile Ala Ala Thr Gln Pro Gly Asp Ser Ala Val Tyr Phe Cys Ala 100 105 110

Glu Ile Pro Glu Gln Arg * 115 118

> <210> 1670 <211> 116 <212> PRT <213> Homo sapiens

<400> 1670 Met Cys Leu Leu Cys Cys Glu Cys Leu Phe His Leu Trp Lys Arg Ile 10 Asn Trp Trp Gln Gly Phe Cys Ser Phe Tyr Leu Leu Leu Trp Val Gly 25 Leu Leu Ser Phe Pro Pro Asp Pro Pro Trp Lys Ser Phe Thr Pro Ala 35 40 Ile Leu Phe Leu Ala Trp Gly Thr Gly Ser Ser Pro Gly Arg His Arg 55 Phe Ser Leu Pro Thr Asp Arg Arg Pro Ser Ala His Ser Pro Phe Leu 75 70 Ser Thr Leu Gln His Ser Ile Arg Thr Leu Phe His Ser Pro Ile Arg 85 90 Ser Ser Arg Phe Ala Phe Val Ser Ser Leu His Ser Tyr Thr Ser Ile 100 105 Pro Ser Leu Pro 115 116

<210> 1671 <211> 70 <212> PRT <213> Homo sapiens

<210> 1672 <211> 263 <212> PRT <213> Homo sapiens

<400> 1672
Mét Arg Val Leu Cys Ala Phe Pro Glu Ala Met Pro Ser Ser Asn Ser

10 Arg Pro Pro Ala Cys Leu Ala Pro Gly Ala Leu Tyr Leu Ala Leu Leu 20 25 Leu His Leu Ser Leu Ser Ser Gln Ala Gly Asp Arg Arg Pro Leu Pro 40 Val Asp Arg Ala Ala Gly Leu Lys Glu Lys Thr Leu Ile Leu Leu Asp Val Ser Thr Lys Asn Pro Val Arg Thr Val Asn Glu Asn Phe Leu Ser Leu Gln Leu Asp Pro Ser Ile Ile His Asp Gly Trp Leu Asp Phe Leu 90 Ser Ser Lys Arg Leu Val Thr Leu Ala Arg Gly Leu Ser Pro Ala Phe 105 Leu Arg Phe Gly Gly Lys Arg Thr Asp Phe Leu Gln Phe Gln Asn Leu 120 Arg Asn Pro Ala Lys Ser Arg Gly Gly Pro Gly Pro Asp Tyr Tyr Leu 135 Lys Asn Tyr Glu Asp Asp Ile Val Arg Ser Asp Val Ala Leu Asp Lys 150 155 Gln Lys Gly Cys Lys Ile Ala Gln His Pro Asp Gly Met Leu Glu Pro 165 170 Pro Arg Glu Lys Ala Ala Gln Met His Leu Val Leu Leu Lys Glu Gln 180 185 Phe Ser Asn Thr Tyr Ser Asn Leu Ile Leu Thr Glu Pro Asn Asn Tyr 200 Arg Thr Met His Gly Arg Ala Val Asn Gly Ser Gln Leu Gly Lys Asp 215 220 Tyr Ile Gln Leu Lys Ser Leu Leu Gln Pro Ile Arg Ile Tyr Ser Arg 230 235 Ala Ser Leu Tyr Gly Pro Asn Ile Val Arg Pro Arg Lys Asn Val Ile 245 Ala Leu Leu Asp Gly Leu * 260 262

<210> 1673 <211> 156 <212> PRT <213> Homo sapiens

<400> 1673

Met Lys Trp Lys Thr Gly Val Ala Ile Phe Val Val Val Val Tyr 10 Leu Val Thr Gly Gly Leu Val Phe Arg Ala Leu Glu Gln Pro Phe Glu 25 Ser Ser Gln Lys Asn Thr Ile Ala Leu Glu Lys Ala Glu Phe Leu Arg 40 Asp His Val Cys Val Ser Pro Gln Glu Leu Glu Thr Leu Ile Gln His 55 60 Ala Leu Asp Ala Asp Asn Ala Gly Val Ser Pro Ile Gly Asn Ser Ser 70 75 Asn Asn Ser Ser His Trp Asp Leu Gly Ser Ala Phe Phe Phe Ala Gly 90 85 Thr Val Ile Thr Thr Ile Gly Tyr Gly Asn Ile Ala Pro Ser Thr Glu 105 110 Gly Gly Lys Ile Phe Cys Ile Leu Tyr Ala Ile Phe Gly Phe Pro Leu 115 120 125

Phe Gly Phe Leu Leu Ala Gly Ile Glu Asp Gln Leu Gly Thr Ile Phe 130 135 140 .

Gly Lys Ser Ile Ala Arg Val Glu Lys Val Phe *

145 150 155

<210> 1674 <211> 83 <212> PRT <213> Homo sapiens

<400> 1674 Met Cys Cys Val Ile Cys Ser Lys Gln Tyr Val Leu Leu Ser Ile Leu . 5 10 Leu Cys Leu Leu Ala Ser Gly Ser Val Asp Phe Phe Leu Leu Pro His 20 25 Ser Val Leu Ala Asp Asp Asp Gly Ile Lys Val Val Lys Val Thr Phe 40 45 Asn Lys Gln Asp Ser Leu Val Ile Leu Thr Ile Met Val Ser Leu Thr 55 Val Ser Phe Pro Gly Leu Cys Thr Cys Gln Ala Gly Thr Gln Asp Thr 70 75 Tyr Thr * . 82

<210> 1675 <211> 54 <212> PRT <213> Homo sapiens

<210> 1676 <211> 119 <212> PRT <213> Homo sapiens

<210> 1677 <211> 49 <212> PRT <213> Homo sapiens

<210> 1678 <211> 127 <212> PRT <213> Homo sapiens

<400> 1678 Met Gln Thr Lys Gly Gly Gln Thr Trp Ala Arg Arg Ala Leu Leu Leu 10 Gly Ile Leu Trp Ala Thr Ala His Leu Pro Leu Ser Gly Thr Ser Leu Pro Gln Arg Leu Pro Arg Ala Thr Gly Asn Ser Thr Gln Cys Val Ile 40 Ser Pro Ser Ser Glu Phe Pro Glu Gly Phe Phe Thr Arg Gln Glu Arg 55 Arg Asp Gly Gly Ile Ile Ile Tyr Phe Leu Ile Ile Val Tyr Met Phe 75 Met Ala Ile Ser Ile Val Cys Asp Glu Tyr Phe Leu Pro Ser Leu Glu 90 Ile Ile Ser Glu Tyr Ile Gly Asn Lys Lys Glu Met Gln Val Leu Ile 100 105 Pro Gly Arg Ile Val Ser Lys Leu Lys Lys Leu Gly Phe Lys * 120

<210> 1679

<211> 49 <212> PRT <213> Homo sapiens

<210> 1680 <211> 58 <212> PRT <213> Homo sapiens

<210> 1681 <211> 49 <212> PRT <213> Homo sapiens

<210> 1682 <211> 78 <212> PRT <213> Homo sapiens

<210> 1683 <211> 52 <212> PRT <213> Homo sapiens

<210> 1684 <211> 165 <212> PRT <213> Homo sapiens

<400> 1684 Met Pro Ala Pro Pro Leu Pro Gly Gly Trp Asn Thr Trp Gly Pro Ser 10 Leu Ser Leu Pro Leu Leu Leu Gly Ala Val Ala Met Ala Leu Gly . 20 25 Val Arg Pro Pro Gly Gln Val Gly Leu Ser Pro Ile Ala Thr Ala Ser 40 Thr Val Gly Val Pro Arg Cys Leu Gln Thr Ala Phe Arg Gly Asp Ala 55 Gly Trp His Ser Cys Ala Gln Gln Gly Ala Cys Val Ala Leu His Pro 70 75 Ser Glu Arg Arg Leu Gly Ile Ser Asp Glu Ala His Ser Arg Ser Arg 85 90 Trp Gly Glu Asp Ser Pro Ser Pro Leu Thr Gly Pro Pro Leu Ser 105 100 Pro Ser Pro Pro Asp Cys Leu Ser Leu Pro Arg Leu Thr Pro Leu Arg 120 125 Leu Pro Pro Pro Pro Phe Pro Phe Leu Gly Pro Ile Pro Ser Leu Pro 135 140 Pro Pro Pro Ser Pro Pro Pro Gln Pro Pro Ala Thr Ala Pro Pro Pro 155

Ser Leu Arg Phe * 164

<210> 1685 <211> 153 <212> PRT <213> Homo sapiens

<400> 1685 Met Gly Thr Ala Ala Leu Gly Pro Val Trp Ala Ala Leu Leu Leu Phe 10 1 Leu Leu Met Cys Glu Ile Pro Met Val Glu Leu Thr Phe Asp Arg Ala 25 20 Val Ala Ser Gly Cys Gln Arg Cys Cys Asp Ser Glu Asp Pro Leu Asp 40 Pro Ala His Val Ser Ser Ala Ser Ser Ser Gly Arg Pro His Ala Leu 55 Pro Glu Ile Arg Pro Tyr Ile Asn Ile Thr Ile Leu Lys Ala Gln Arg 70 Ala Gln His His Ala Glu Pro Glu Cys Asp Ala Gly Pro Gly Leu Arg 90 Gly Pro Arg Leu Gly Ala Ala Leu Gln Ala Pro Ala Arg Glu Arg His 105 100 Leu Gln Gln Arg Leu Arg His Leu His His Leu Gln Arg Pro Pro His 120 125 Gln Gly Arg Gly Arg Leu Arg Ala Ser Gly Pro Pro Ser Arg Leu Glu 135 Ser Ser Ala Asp Pro Ala Pro Ala * 150

<210> 1686 <211> 141 <212> PRT <213> Homo sapiens

<400> 1686 Met Arg Arg Thr Ala Phe Ile Leu Gly Ser Gly Leu Leu Ser Phe Val 1 5 Ala Phe Trp Asn Ser Val Thr Trp His Leu Gln Arg Phe Trp Gly Ala 20 25 Ser Gly Tyr Phe Trp Gln Ala Gln Trp Glu Arg Leu Leu Thr Thr Phe 40 Glu Gly Lys Glu Trp Ile Leu Phe Phe Ile Gly Ala Ile Gln Val Pro 55 Cys Leu Phe Phe Trp Ser Phe Asn Gly Leu Leu Val Val Asp Thr 70 Thr Gly Lys Pro Asn Phe Ile Ser Arg Tyr Arg Ile Gln Val Gly Lys 85 90 Asn Glu Pro Val Asp Pro Val Lys Leu Arg Gln Ser Ile Arg Thr Val 105 110 100 Leu Phe Asn Gln Cys Met Ile Ser Phe Pro Met Gly Gly Leu Pro Leu 120 Ser Leu Pro Gln Met Val Glu Arg Pro Leu Thr Pro *

130 135 140

<210> 1687 <211> 61 <212> PRT <213> Homo sapiens

<210> 1688 <211> 68 <212> PRT <213> Homo sapiens

<210> 1689 <211> 74 <212> PRT <213> Homo sapiens

<210> 1690 <211> 114 <212> PRT <213> Homo sapiens

<400> 1690 Met His Met Cys Ala Phe Leu His Val Trp Thr Cys Ala Cys Met His 5 10 Leu Cys Val Cys Val Cys Ala Glu Thr Gly Lys Gly Val Lys Val Leu 20 25 30 Val Arg Glu Pro Gly Ser Phe Leu Phe Pro Asn Leu Ser Cys Ser Lys 45 35 40 Glu Gly Trp Gly Trp Gly Gln Pro Leu Leu Lys Val Ile Gly Glu Glu 55 Arg Phe Ser Asp Ser Glu Val Thr Ala Ser Val Ala Gln Ala Val Ser 70 75 Leu Val Thr Val Ile Leu Gln Phe Ser Asp Pro His Val Ser Phe Arg 90 85 Gly Lys Arg Lys Lys Gly Thr Leu Trp Trp Val Leu Gly Gly Lys Arg 105 100 Lys * 113

<210> 1691 <211> 69 <212> PRT <213> Homo sapiens

<400> 1691 Met Ala Phe Leu Leu Ser Thr Leu Leu Asn His Tyr Leu Ala Cys Lys 10 1 5 His Ser Ser Glu Leu Trp Leu Gln Ser Ser Leu Asn Asn Leu Gly Lys 20 25 Lys Lys Asp Lys Ala Tyr Ile Phe Thr Val Leu Ala Leu Lys His Ile 40 Pro Gln Met Pro Leu Arg Ile Tyr Phe Val Leu Gly Gln Ser Trp Trp 50 55 60 Leu Met Pro Val Ser 65 69

<210> 1692 <211> 103 <212> PRT <213> Homo sapiens

<210> 1693 <211> 48 <212> PRT <213> Homo sapiens

<400> 1693

Met Gly Arg Phe Leu Asp Glu Gln Trp Val Tyr Phe Ile Ile Leu Leu 1

Leu Phe Phe Phe Arg Asp Ser Leu Ala Leu Ser Pro Arg Leu Glu

Cys Ser Gly Ala Ile Ser Val His Ser Lys Leu Arg Leu Pro Gly Ser 48

<210> 1694 <211> 92 <212> PRT <213> Homo sapiens

<400> 1694

<210> 1695 <211> 83 <212> PRT <213> Homo sapiens

<210> 1696 <211> 159 <212> PRT <213> Homo sapiens

<400> 1696 Met Leu Trp Leu Phe Gln Ser Leu Leu Phe Val Phe Cys Phe Gly Pro 1 5 10 Gly Asn Val Val Ser Gln Ser Ser Leu Thr Pro Leu Met Val Asn Gly 20 25 Ile Leu Gly Glu Ser Val Thr Leu Pro Leu Glu Phe Pro Ala Gly Glu 40 Lys Val Asn Phe Ile Thr Trp Leu Phe Asn Glu Thr Ser Leu Ala Phe 55 60 Ile Val Pro His Glu Thr Lys Ser Pro Glu Ile His Val Thr Asn Pro 75 70 Lys Gln Gly Lys Arg Leu Asn Phe Thr Gln Ser Tyr Ser Leu Gln Leu 85 90 Ser Asn Leu Lys Met Glu Asp Thr Gly Ser Tyr Arg Ala Gln Ile Ser 105 Thr Lys Thr Ser Ala Lys Leu Ser Ser Tyr Thr Leu Arg Ile Leu Thr 120 125 Leu Tyr Pro Ile Val Gly Asn Gly Ile Trp Gly Asn Lys Asn Phe Leu 135 140 Thr Thr Leu Ala Arg Gly Asn Val Lys Leu Asp Gly Leu His Glu

<210> 1697 <211> 105 <212> PRT <213> Homo sapiens

PCT/US01/02687 WO 01/54477

40 Pro Gln Gln Thr Thr Val Leu Asp Leu Arg Phe Asn Arg Ile Arg Glu 50 55 Ile Pro Gly Ser Ala Phe Lys Lys Leu Lys Asn Leu Asn Thr Leu Tyr 75 70 Leu Tyr Lys Asn Glu Ile His Ala Leu Asp Lys Gln Thr Phe Lys Gly 85 90 Leu Ile Ser Leu Glu His Leu Tyr Ile

<210> 1698 <211> 195 <212> PRT <213> Homo sapiens

<400> 1698 Met Pro Ser Trp Ile Gly Ala Val Ile Leu Pro Leu Leu Gly Leu Leu 10 Leu Ser Leu Pro Ala Gly Ala Asp Val Lys Ala Arg Ser Cys Gly Glu 25 20 Val Arg Gln Ala Tyr Gly Ala Lys Gly Phe Ser Leu Ala Asp Ile Pro 35 40 Tyr Gln Glu Ile Ala Gly Glu His Leu Arg Ile Cys Pro Gln Glu Tyr 55 60 Thr Cys Cys Thr Thr Glu Met Glu Asp Lys Leu Ser Gln Gln Ser Lys 70 75 Leu Glu Phe Glu Asn Leu Val Glu Glu Thr Ser His Phe Val Arg Thr 85 90 95 Thr Phe Val Ser Arg His Lys Lys Phe Asp Glu Phe Phe Arg Glu Leu 105 Leu Glu Asn Ala Glu Lys Ser Leu Asn Asp Met Phe Val Arg Thr Tyr 115 120 125 Gly Met Leu Tyr Met Gln Asn Ser Glu Val Phe Gln Asp Leu Phe Thr 130 135 140 Glu Leu Lys Arg Tyr Tyr Thr Gly Gly Asn Val Asn Leu Glu Glu Met 150 155 Leu Asn Asp Phe Trp Ala Arg Leu Leu Glu Arg Met Phe Gln Leu Ile 165 170 Asn Pro Gln Tyr Pro Phe Ser Glu Gly Phe Leu Gly Met Cys Glu Gln 185 Ile Pro * 194

<210> 1699 <211> 97 <212> PRT <213> Homo sapiens

<400> 1699 Met Asp Ser Pro Trp Ala Gly Leu Leu Trp Leu Leu Pro Thr Leu Trp 10 15 Ser Ser Phe Pro Ala Pro Ala Cys Trp Pro Ser Ser Ser Ser Ser

 Pro Val Cys Ala Ala Ala Asn Gly Ala Met Ser Ala Ser Arg Asn Leu Arg

 35
 40
 45

 Thr Leu Lys Gly Arg Thr Ala Pro Gly Ser Thr Leu Pro Leu Arg Arg
 50
 55

 Arg Pro Pro Pro Pro His Ser Arg Cys Leu Met Ser Thr Phe Ser Arg Trp
 65
 70

 Leu Arg Ser Pro Cys Gln Cys Leu Pro Arg Ser Leu His Thr Gln Thr
 95

<210> 1700 <211> 129 <212> PRT <213> Homo sapiens

<400> 1700 Met Gly Trp Ala Pro Leu Leu Leu Thr Leu Leu Ala His Cys Thr Gly 5 10 Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Glu Ser Glu Ala 20 25 Pro Gly Gln Trp Val Asn Ile Ser Cys Thr Gly Ser Gly Ser Asn Leu 45 40 Gly Ala Gly Phe Asp Val Gln Trp Tyr Gln Leu Ile Pro Gly Thr Ala 55 Pro Lys Leu Leu Ile Phe Asn Asn Asn Arg Gln Pro Ser Gly Val Pro 70 Asp Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Thr Ile 85 90 Asn Asp Leu Gln Pro Glu Asp Glu Ser Glu Tyr Tyr Cys Leu Ala Met 105 Thr Ala Ala Ser Leu Val Ser Ser Glu Leu Gly Pro Lys Ser Pro Ala 120

<210> 1701 <211> 219 <212> PRT <213> Homo sapiens

<400> 1701 Met Arg Thr His Thr Arg Gly Ala Pro Ser Val Phe Phe Ile Tyr Leu 15 5 10 Leu Cys Phe Val Ser Ala Tyr Ile Thr Asp Glu Asn. Pro Glu Val Met 20 25 30 Ile Pro Phe Thr Asn Ala Asn Tyr Asp Ser His Pro Met Leu Tyr Phe 40 Ser Arg Ala Glu Val Ala Glu Leu Gln Leu Arg Ala Ala Ser Ser His 55 60 Glu His Ile Ala Ala Arg Leu Thr Glu Ala Val His Thr Met Leu Ser 70 75 Ser Pro Leu Glu Tyr Leu Pro Pro Trp Asp Pro Lys Asp Tyr Ser Ala

85 90 Arg Trp Asn Glu Ile Phe Gly Asn Asn Leu Gly Ala Leu Ala Met Phe 105 Cys Val Leu Tyr Pro Glu Asn Ile Glu Ala Arg Asp Met Ala Lys Asp 115 120 125 Tyr Met Glu Arg Met Ala Ala Gln Pro Ser Trp Leu Val Lys Asp Ala 130 135 140 Pro Trp Asp Glu Val Pro Leu Ala His Ser Leu Val Gly Phe Ala Thr 150 155 Ala Tyr Asp Phe Leu Tyr Asn His Leu Ser Lys Thr Gln Gln Glu Lys 165 170 Phe Leu Glu Val Ile Ala Asn Ala Ser Gly Tyr Met Phe Val Thr Leu 180 185 Ile Leu Gly Ala Asp Gly Asp Ser Asn Thr Cys Thr Ile Ile Ser Pro 195 200 Pro Thr Val Trp Leu Cys Ser Arg Glu Ala * 215

<210> 1702 <211> 86 <212> PRT <213> Homo sapiens

<210> 1703 <211> 229 <212> PRT <213> Homo sapiens

Phe Cys Asp Met Thr Ser Gly Gly Gly Gly Trp Thr Leu Val Ala Ser 85 90 Val His Glu Asn Asp Met His Gly Lys Cys Thr Val Gly Asp Arg Trp 100 105 Ser Ser Gln Gln Gly Asn Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn 125 120 Trp Ala Asn Tyr Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp 130 135 Asp Tyr Lys Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly 145 150 155 Ile Trp His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser 165 170 175 Ala Leu Leu Arg Tyr Arg Thr Asn Thr Gly Phe Leu Gln Arg Leu Gly 180 185 190 His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Arg Ser 195 200 205 Gly Lys Cys Trp Asn Asp Asn Gly Pro Ala Ile Pro Trp Val Tyr Asp 215 Phe Gly Glu Ala * 225 228

<210> 1704 <211> 202 <212> PRT <213> Homo sapiens

<400> 1704

Met Val Phe Pro Val Met Tyr Asn Leu Ile Ile Leu Val Cys Arg Ala 10 Cys Phe Pro Asp Leu Gln His Gly Tyr Leu Val Ala Trp Leu Val Leu 25 Asp Tyr Thr Ser Asp Leu Leu Tyr Leu Leu Asp Met Val Val Arg Phe 35 40 45 His Thr Gly Phe Leu Glu Gln Gly Ile Leu Val Val Asp Lys Gly Arg 55 Ile Ser Ser Arg Tyr Val Arg Thr Trp Ser Phe Phe Leu Asp Leu Ala Ser Leu Met Pro Thr Asp Val Val Tyr Val Arg Leu Gly Pro His Thr 85 90 Pro Thr Leu Arg Leu Asn Arg Phe Leu Arg Ala Pro Arg Leu Phe Glu 100 105 110 Ala Phe Asp Arg Thr Glu Thr Arg Thr Ala Tyr Pro Asn Ala Phe Cys 120 125 • Ile Gly Lys Leu Met Leu Tyr Ile Phe Gly Arg Ile His Trp Asn Asn 130 135 Cys Leu Tyr Phe Ser Leu Ser Arg Tyr Leu Gly Phe Gly Arg Glu Pro 145 150 155 160 Met Gly Val Pro Arg Thr Pro Ala Pro Thr Trp Val Leu Thr Ala Arg 165 170 175 Gly Gly Pro Val Thr Ser Tyr Lys Leu Phe Asn Phe Phe His Pro Leu 180 185 190 Asp Thr Trp Ile Ile Gln Gly Gly Glu * 200 201

<210> 1705 <211> 58 <212> PRT <213> Homo sapiens

<400> 1705

<210> 1706 <211> 55 <212> PRT <213> Homo sapiens

<400> 1706

<210> 1707 <211> 139 <212> PRT <213> Homo sapiens

<400> 1707

 Met
 Leu
 Glu
 Cys
 Ala
 Phe
 Ile
 Val
 Leu
 Trp
 Leu
 Gly
 Leu
 Gly
 Trp
 Leu
 Leu
 Gly
 Trp
 Leu
 Arg
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 Gly
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 Arg
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 Arg
 Gly
 Leu
 Arg
 Gly</th

Leu Lys Val Leu Ala Leu Tyr Pro Glu Pro * 130 135 138

<210> 1708

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1708

<210> 1709

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1709

 Met
 Arg
 Leu
 Pro
 Trp
 Glu
 Leu
 Leu
 Val
 Leu
 Gln
 Ser
 Phe
 Ile
 Leu
 Cys

 Leu
 Ala
 Asp
 Asp
 Ser
 Thr
 Leu
 His
 Gly
 Pro
 Ile
 Phe
 Ile
 Gln
 Glu
 Pro

 Ser
 Pro
 Val
 Met
 Phe
 Pro
 Leu
 Asp
 Ser
 Glu
 Glu
 Lys
 Lys
 Ala
 Lys
 Leu

 Asn
 Cys
 Glu
 Asp
 Ala
 Asp
 Thr
 Gly
 Met
 Glu
 Phe
 Ile
 Arg
 Trp
 Lys
 Leu

 Asn
 Gly
 Ala
 Asp
 Thr
 Gly
 Met
 Glu
 Phe
 Leu
 Leu
 Gln
 Arg
 Cys

 65
 70
 75
 75
 80
 Cys
 Re

<210> 1710

<211> 399

<212> PRT

<213> Homo sapiens

<400> 1710

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55
Ile Asn Leu Thr Trp His Lys Asn Asp Ser Ala Arg Thr Val Pro Gly
                   70
                                      75
Glu Glu Glu Thr Arg Met Trp Ala Gln Asp Gly Ala Leu Trp Leu Leu
               85
                                 90
Pro Ala Leu Gln Glu Asp Ser Gly Thr Tyr Val Cys Thr Thr Arg Asn
                            105
Ala Ser Tyr Cys Asp Lys Met Ser Ile Glu Leu Arg Val Phe Glu Asn
                         120
Thr Asp Ala Phe Leu Pro Phe Ile Ser Tyr Pro Gln Ile Leu Thr Leu
                     135
Ser Thr Ser Gly Val Leu Val Cys Pro Asp Leu Ser Glu Phe Thr Arg
                 150
                                    155
Asp Lys Thr Asp Val Lys Ile Gln Trp Tyr Lys Asp Ser Leu Leu Leu
              165
                                170
Asp Lys Asp Asn Glu Lys Phe Leu Ser Val Arg Gly Thr Thr His Leu
                             185
Leu Val His Asp Val Ala Leu Glu Asp Ala Gly Tyr Tyr Arg Cys Val
                          200
Leu Thr Phe Ala His Glu Gly Gln Gln Tyr Asn Ile Thr Arg Ser Ile
                      215
                                       220
Glu Leu Arg Ile Lys Lys Lys Glu Glu Thr Ile Pro Val Ile Ile
                                    235
                  230
Ser Pro Leu Lys Thr Ile Ser Ala Ser Leu Gly Ser Arg Leu Thr Ile
                                250
Pro Cys Lys Val Phe Leu Gly Thr Gly Thr Pro Leu Thr Thr Met Leu
                            265
Trp Trp Thr Ala Asn Asp Thr His Ile Glu Ser Ala Tyr Pro Gly Gly
                       280
                               285
Arg Val Thr Glu Gly Pro Arg Gln Glu Tyr Ser Glu Asn Asn Glu Asn
                     295
                                       300
Tyr Ile Glu Val Pro Leu Ile Phe Asp Pro Val Thr Arg Glu Asp Leu
                  310
                                    315
His Met Asp Phe Lys Cys Val Val His Asn Thr Leu Ser Phe Gln Thr
             325
                                330
Leu Arg Thr Thr Val Lys Glu Ala Ser Ser Thr Phe Ser Trp Gly Ile
                                     350
        340 345
Val Leu Ala Pro Leu Ser Leu Ala Phe Leu Val Leu Gly Gly Ile Trp
      355 . 360
                                         365
Met His Arg Arg Cys Lys His Arg Thr Gly Lys Ala Asp Gly Leu Thr
                     375
Val Leu Trp Pro His His Gln Asp Phe Gln Ser Tyr Pro Lys *
                 390
                                    395
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<210> 1711 <211> 254 <212> PRT <213> Homo sapiens

Ile Ser Cys Pro His Glu Cys Phe Glu Ala Ile Leu Ser Leu Asp Thr 55 Gly Tyr Arg Ala Pro Val Thr Leu Val Arg Lys Gly Cys Trp Thr Gly 70 . 75 Pro Pro Ala Gly Gln Thr Gln Ser Asn Ala Asp Ala Leu Pro Pro Asp 90 95 85 Tyr Ser Val Val Arg Gly Cys Thr Thr Asp Lys Cys Asn Ala His Leu 100 . 105 Met Thr His Asp Ala Leu Pro Asn Leu Ser Gln Ala Pro Asp Pro Pro 120 125 115 Thr Leu Ser Gly Leu Glu Cys Tyr Ala Cys Ile Gly Val His Gln Asp 130 135 Asp Cys Ala Ile Gly Arg Ser Arg Arg Val Gln Cys His Gln Asp Gln . 150 155 Thr Ala Cys Phe Gln Gly Asn Gly Arg Met Thr Val Gly Asn Phe Ser 170 175 165 Val Pro Val Tyr Ile Arg Thr Cys His Arg Ala Leu Leu His His Leu 180 185 Met Gly Thr Thr Ser Pro Trp Thr Ala Ile Gly Pro Pro Arg Gly Ser 195 200 Cys Cys Glu Gly Tyr Leu Cys Asn Arg Lys Ser Met Thr Gln Pro Phe 215 220 Thr Ser Ala Ser Ala Thr Thr Pro Pro Arg Ala Leu Gln Val Leu Ala 225 230 235 Leu Leu Leu Pro Val Leu Leu Leu Val Gly Leu Ser Ala * 250 245

<210> 1712 <211> 124 <212> PRT <213> Homo sapiens

<400> 1712 Met Thr Trp Leu Leu Val Ala Tyr Ala Asp Phe Val Val Thr Phe Val 1 5 10 15 Met Leu Leu Pro Ser Lys Asp Phe Trp Tyr Ser Val Val Asn Gly Val 25 20 Ile Phe Asn Cys Leu Ala Val Leu Ala Leu Ser Ser His Leu Arg Thr 40 Met Leu Thr Asp Pro Glu Lys Ser Ser Asp Cys Arg Pro Ser Ala Cys 60 55 Thr Val Lys Thr Gly Leu Asp Pro Thr Leu Val Gly Ile Cys Gly Glu 75 70 Gly Thr Glu Ser Val Gln Ser Leu Leu Gly Ala Val Pro Lys Gly 90 85 Asn Ala Thr Lys Glu Tyr Met Asp Glu Leu Ala Ala Glu Ala Arg Gly 105 Ser His Leu Gln Val Pro Gln Val Leu Leu Tyr * . 120

<210> 1713 <211> 214 <212> PRT <213> Homo sapiens

<400> 1713 Met Leu His Leu Val Phe Ile Leu Pro Ser Leu Met Leu Leu Ile Pro 5 10 His Ile Leu Leu Glu Asn Phe Ala Ala Ile Pro Gly His Arg Cys 20 25 Trp Val His Met Leu Asp Asn Asn Thr Gly Ser Gly Asn Glu Thr Gly 40 Ile Leu Ser Glu Asp Ala Leu Leu Arg Ile Ser Ile Pro Leu Asp Ser 55 Asn Leu Arg Pro Glu Lys Cys Arg Arg Phe Val His Pro Gln Trp Gln Leu Leu His Leu Asn Gly Thr Ile His Ser Thr Ser Glu Ala Asp Thr 85 90 Glu Pro Cys Val Asp Gly Trp Val Tyr Asp Gln Ser Tyr Phe Pro Ser 105 Thr Ile Val Thr Lys Trp Asp Leu Val Cys Asp Tyr Gln Ser Leu Lys 120 125 Ser Val Val Gln Phe Leu Leu Leu Thr Gly Met Leu Val Gly Gly Ile 135 140 Ile Gly Gly His Val Ser Asp Arg Trp Leu Val Glu Ser Ala Arg Trp 150 155 Leu Ile Ile Thr Asn Lys Leu Asp Glu Gly Leu Lys Ala Leu Arg Lys 165 170 Val Ala Arg Thr Asn Gly Ile Lys Asn Ala Glu Arg Asn Pro Glu His 185 Arg Gly Cys Lys Ile His His Ala Gly Gly Ala Gly Cys Ser Thr Asp 200 Gln Asn Tyr Cys Val * 210 213

<210> 1714 <211> 178 <212> PRT <213> Homo sapiens

<400> 1714

Met Ala Ala Ser Trp Ser Leu Leu Val Thr Leu Arg Pro Leu Ala Gln 10 Ser Pro Leu Arg Gly Arg Cys Val Gly Cys Gly Ala Trp Ala Ala Ala 20 25 Leu Ala Pro Leu Ala Thr Ala Pro Gly Lys Pro Phe Trp Lys Ala Tyr 40 Thr Val Gln Thr Ser Glu Ser Met Thr Pro Thr Ala Thr Ser Glu Thr 55 Tyr Leu Lys Ala Leu Ala Val Cys His Gly Pro Leu Asp His Tyr Asp 70 75 Phe Leu Ile Lys Ala His Glu Leu Lys Asp Asp Glu His Gln Arg Arg 90 Val Ile Gln Cys Leu Gln Lys Leu His Glu Asp Leu Lys Gly Tyr Asn 105 Ile Glu Ala Glu Gly Leu Phe Phe Lys Ala Phe Phe Lys Glu Gln Thr 120 125 Ser Lys Gly Pro Val Cys Leu Trp Arg Cys Trp Tyr Arg Lys Asn Asn 135

<210> 1715 <211> 76 <212> PRT <213> Homo sapiens

<210> 1716 <211> 83 <212> PRT <213> Homo sapiens

<400> 1716 Met Arg Phe Thr Phe Pro Leu Met Ala Ile Val Leu Glu Ile Ala Met 5 10 Ile Ala Ser Phe Gly Leu Phe Val Glu Tyr Glu Thr Asp His Thr Val 20 25 Leu Glu His Phe Asn Ile Thr Lys Pro Ser Asp Met Gly Ile Phe Phe 35 40 45 Glu Leu Tyr Pro Leu Phe Gln Asp Val His Gly Met Ile Phe Val Gly 55 60 Phe Asp Phe Pro Pro Asp Leu Pro Glu Glu Leu Trp Val Ser Gln Arg 65 70 Gly Tyr * 82

<210> 1717 <211> 57 <212> PRT <213> Homo sapiens

<400> 1717
Met Ala Leu Phe Phe Leu Ala Leu Asn Phe Trp Lys Val Gly Met Ala

<210> 1718 <211> 76 <212> PRT <213> Homo sapiens

<210> 1719 <211> 71 <212> PRT <213> Homo sapiens

<210> 1720 <211> 101 <212> PRT <213> Homo sapiens

Phe Pro Leu Pro His Pro Thr Leu Gly Pro Arg Arg His Ala Ser Leu 30 25 Thr Gln Leu Gly Pro Ala Phe Trp Met Ala Trp Gly Arg Pro Trp Ala 40 45 His Leu Gly Pro Gly Gln Pro Leu Gly Gln Leu Trp Lys Ser Ser Val 60 55 Glu Glu His Leu Leu Ala Ala Trp Leu Gln Pro Leu Ala Leu Leu Glu 75 70 Trp Ser Leu Gly Ala Ser Ala Leu Ser Ala Leu Gly Thr Ser His Pro 85 Leu Gly Leu Gln * 100

<210> 1721 <211> 48 <212> PRT <213> Homo sapiens

<210> 1722 <211> 70 <212> PRT <213> Homo sapiens

<210> 1723 <211> 54 <212> PRT <213> Homo sapiens

<400> 1723
Met Asp Leu Ile Phe Val Lys Val Leu Leu Ile Phe Ala Ala Ile Gln

1 5 10 15

Thr Leu Ser Lys Trp Gln Phe Ala Phe Thr Phe Ser Ile Gln Thr Val
20 25 30

Pro Ser Leu Val Ile Asn Leu Ser Trp Leu Leu Leu Asp Leu Lys Pro
35 40 45

Gly Thr His Ile Gln *
50 53

<210> 1724 <211> 60 <212> PRT <213> Homo sapiens

(213) NOMO Baptem

<210> 1725 <211> 63 · <212> PRT <213> Homo sapiens

<210> 1726 <211> 57 <212> PRT <213> Homo sapiens

Ser Gln Arg Leu Lys Glu Glu * 50 55 56

<210> 1727 <211> 46

<212> PRT

<213> Homo sapiens

<400> 1727

 Met
 Arg
 Trp
 Pro
 Ttp
 Ala
 Ser
 Ttp
 Ala
 Val
 Leu
 Leu
 Leu
 Pro
 10
 - - 15
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<210> 1728

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1728

<210> 1729

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1729

<210> 1730

<211> 50

<212> PRT

<213> Homo sapiens

<210> 1731 <211> 227 <212> PRT <213> Homo sapiens

<400> 1731 Met Gly Cys Asp Gly Arg Val Ser Gly Leu Leu Arg Arg Asn Leu Gln 10 Pro Thr Leu Thr Tyr Trp Ser Val Phe Phe Ser Phe Gly Leu Cys Ile 25 20 Ala Phe Leu Gly Pro Thr Leu Leu Asp Leu Arg Cys Gln Thr His Ser 40 Ser Leu Pro Gln Ile Ser Trp Val Phe Phe Ser Gln Gln Leu Cys Leu Leu Leu Gly Ser Ala Leu Gly Gly Val Phe Lys Arg Thr Leu Ala Gln 75 70 Ser Leu Trp Ala Leu Phe Thr Ser Ser Leu Ala Ile Ser Leu Val Phe 85 90 Ala Val Ile Pro Phe Cys Arg Asp Val Lys Val Leu Ala Ser Val Met 105 Ala Leu Ala Gly Leu Ala Met Gly Cys Ile Asp Thr Val Ala Asn Met 120 125 Gln Leu Val Arg Met Tyr Gln Lys Asp Ser Ala Val Phe Leu Gln Val 135 140 Leu His Phe Phe Val Gly Phe Gly Ala Leu Leu Ser Pro Leu Ile Ala 145 150 155 Asp Pro Phe Leu Ser Glu Ala Asn Cys Leu Pro Ala Asn Ser Thr Gly 170 175 165 Gln His His Leu Pro Arg Ala Thr Cys Ser Met Ser Pro Gly Cys Trp 185 190 Gly Gln His His Val Asp Ala Gln Ala Leu Val Gln Pro Asp Val Pro 200 205 Lys Ala Asp Ser Gln Gly Pro Gly Arg Glu Pro Glu Gly Pro Met Pro 215 Ser Gly * 225 226

<210> 1732 <211> 102 <212> PRT <213> Homo sapiens

<210> 1733 <211> 139 <212> PRT <213> Homo sapiens

<400> 1733 Met Lys Phe Thr Thr Leu Leu Phe Leu Ala Ala Val Ala Gly Ala Leu 1 5 10 Val Tyr Ala Glu Asp Ala Ser Ser Asp Ser Thr Gly Ala Asp Pro Ala 25 Gln Glu Ala Gly Thr Ser Lys Pro Asn Glu Glu Ile Ser Gly Pro Ala 40 Glu Pro Ala Ser Pro Pro Glu Thr Thr Thr Ala Gln Glu Thr Ser 55 Ala Ala Ala Val Gln Gly Thr Ala Lys Val Thr Ser Ser Arg Gln Glu 70 75 80 Leu Asn Pro Leu Lys Ser Ile Val Glu Lys Ser Ile Leu Leu Thr Glu 85 90 Gln Ala Leu Ala Lys Ala Gly Lys Gly Met His Gly Gly Val Pro Gly 105 Gly Lys Gln Phe Ile Glu Asn Gly Ser Glu Phe Ala Gln Lys Leu Leu 115 120 Lys Lys Phe Ser Leu Leu Lys Pro Trp Ala * 135

<210> 1734 <211> 60 <212> PRT <213> Homo sapiens

35 40 45
Gln Leu Val Cys Trp Ile Leu Thr Phe Phe Phe *
50 55 59

<210> 1735 <211> 73 <212> PRT <213> Homo sapiens

<210> 1736 <211> 65 <212> PRT <213> Homo sapiens

<210> 1737 <211> 47 <212> PRT <213> Homo sapiens

<210> 1738 <211> 107 <212> PRT <213> Homo sapiens

65 70 75 80
Leu Val Phe Gln Ser Tyr Glu Tyr Val Asp Cys Arg Gly Asn Ala Ser

Val Pro His Gln Leu Thr Pro His Pro Pro * 100 105 106

<210> 1739 <211> 90 <212> PRT <213> Homo sapiens

<210> 1740 <211> 57 <212> PRT <213> Homo sapiens

85

 $^{<400>}$ 1740 Met His Cys Val Leu Glu Ile Leu Val Ser Val Leu Gly Leu Thr His 1 5 10 15 His Leu Leu Leu Arg Asp Arg Asp His Tyr Arg Leu Val Arg Leu Met

20 25 30 Cly Asp Val Gly Gly Glu Gly Glu Leu Lys Ala Met Trp Arg Val Cys
35 40 45
Leu Ser Val Cys Arg Val Asp Lys *
50 55 56

<210> 1741 <211> 49 <212> PRT <213> Homo sapiens

<210> 1742 <211> 87 <212> PRT <213> Homo sapiens

<210> 1743 <211> 49 <212> PRT <213> Homo sapiens

Gly Trp Leu Asn Glu Leu Lys Thr Ser Leu Lys Tyr Ile Arg Leu Arg 35 40 45 48

<210> 1744 <211> 57 <212> PRT

<213> Homo sapiens

<210> 1745 <211> 96 <212> PRT <213> Homo sapiens

<400> 1745

 Met
 Asn
 Gln
 Leu
 Ser
 Phe
 Leu
 Leu
 Phe
 Leu
 Ile
 Ala
 Thr
 Thr
 Arg
 Gly
 Ala
 Asn
 Thr
 Tyr
 Phe
 Leu
 Glu
 Cys
 Thr
 Cys
 Ser
 Phe
 Leu
 Glu
 Cys
 Thr
 Cys
 Ser
 Asp
 Glu
 Ile
 Lys
 Asp
 Gln
 Cys
 Cys
 Phe
 Ile
 Asp
 Gln
 Cys
 Asp
 Ile
 Asp</th

<210> 1746 <211> 53 <212> PRT <213> Homo sapiens

<400> 1746

 Met Val Ile
 Ser Ala Ala Val Leu Ser Ser Ile Leu Cys Val Phe Leu

 1
 5
 10
 15

 Ser Lys Leu Val Leu Met Asn Asp Glu Cys Leu Arg Leu Thr Phe Trp
 20
 25

 Leu His Cys Asn Ala Lys His Tyr Arg Tyr Ser Met Leu Gly Phe Pro

15 40 45
Lys Leu Thr Ser Val
50 53

<210> 1747 <211> 49 <212> PRT <213> Homo sapiens

<210> 1748 <211> 196 <212> PRT <213> Homo sapiens

195

<400> 1748 Met Ala Met Leu Pro Phe Pro Ile Phe Leu Val Leu Leu Leu Arg Gly 10 . 15 Leu Val Leu Trp Thr Pro Ala Ser Ser Gly Thr Ile Met Pro Glu Glu 25 Arg Lys Thr Glu Ile Glu Arg Glu Thr Glu Thr Glu Ser Glu Thr Val 40 Ile Gly Thr Glu Lys Glu Asn Ala Pro Glu Arg Glu Arg Gly Ser Val 55 60 Ile Thr Val Leu His Gln Val Phe Ser Thr Ala Met Lys Asn Asp Thr 70 75 Asp Thr Gly Asn Met Gln Lys Glu Val Met Ser Val Thr Glu Gln Val 90 Glu Lys Lys Lys Asn Asp Ile Glu Lys Asp Asp Thr Gly Arg Lys Arg 105 Lys Pro Asp Ile Ser Leu Leu Glu Val Ile Val Asp Val Ala Met Lys 120 . 125 Val Lys Lys Glu Ile Val Thr Gly Asp Thr Asn Thr Lys Asn Leu Lys 135 140 Glu Ala Lys Lys Glu Lys Lys Arg Ala Val Ser Leu Pro Leu Asn Arg 150 155 Arg Ala Pro Lys Leu His Leu Gln Asn Arg His Gly Phe Gly Leu Leu 165 170 Cys Ile Leu Val Pro Glu Val Asp Thr Ile Asn Leu Val Ile Phe Leu Asp Asn Val *

<210> 1749 <211> 46 <212> PRT <213> Homo sapiens

<210> 1750 <211> 82 <212> PRT <213> Homo sapiens

<210> 1751 <211> 94 <212> PRT <213> Homo sapiens

<400> 1751 Met Gly Ser Val Phe Trp His Val Leu Phe Cys Ile Ser Gly Val Cys 10 Leu Trp Cys Ala His Arg Met Ala Ala Phe Leu Gln Gln Met Ala Val 20 25 Leu Leu Pro Val Asp Cys Glu Arg Pro Ala Ala Val His Trp Leu Ala 40 Leu Cys Gly Cys Cys Tyr Gly Gln Leu Val Trp Glu Ser Arg Thr Arg 55 Ser Cys Phe Trp Ser Leu Glu Cys Leu Cys Phe Gly Gln His Phe 70 75 Gly Ser Val Pro Ser Phe Phe Cys Ser Ser Val Trp Leu * 85 90

<210> 1752 <211> 143 <212> PRT <213> Homo sapiens

<400> 1752 Met Asp Thr Trp Leu Val Cys Trp Ala Ile Phe Ser Leu Leu Lys Ala 10 Gly Leu Thr Glu Pro Glu Val Thr Gln Thr Pro Ser His Gln Val Thr 20 Gln Met Gly Gln Glu Val Ile Leu Arg Cys Val Pro Ile Ser Asn His 35 40 Leu Tyr Phe Tyr Trp Tyr Arg Gln Ile Leu Gly Gln Lys Val Glu Phe 55 60 Leu Val Ser Phe Tyr Asn Asn Glu Ile Ser Glu Lys Ser Glu Ile Phe • 70 75 Asp Asp Gln Phe Ser Val Glu Arg Pro Asp Gly Ser Asn Phe Thr Leu 85 . 90 Lys Ile Arg Ser Thr Lys Leu Glu Asp Ser Ala Met Tyr Phe Cys Ala 100 105 Ser Ser Glu Arg Gly Ser Gly Ala Asn Val Leu Thr Phe Gly Ala Gly 120 125 Ser Arg Leu Thr Val Leu Glu Asp Leu Lys Asn Val Phe Pro Pro

140

135

<210> 1753 <211> 64 <212> PRT <213> Homo sapiens

<400> 1753
Met Val Cys Arg Leu Pro Cys Thr Leu Leu Pro Trp Pro Leu Lys His

1 5 10 15

Lys Gln Gly Ala Leu Leu Tyr Ile Cys Pro Ala Ser Leu Pro Ala Phe
20 25 30

Asn Pro Arg Asn Leu Ser Val Tyr Leu Leu Phe Ser Ala Ser Glu Ser
35 40 45

Leu Pro Leu Lys Ser Glu Gln Ala Arg Pro Gly Gly Ser Arg Leu *

Leu Pro Leu Lys Ser Glu Gln Ala Arg Pro Gly Gly Ser Arg Leu * 50 60 63

<210> 1754 <211> 124 <212> PRT <213> Homo sapiens

<210> 1755 <211> 111 <212> PRT <213> Homo sapiens

<400> 1755

Met Gln Ala Thr Ser Asn Leu Leu Asn Leu Leu Leu Ser Leu Phe 5 10 Ala Gly Leu Asn Pro Ser Lys Thr His Ile Asn Pro Lys Glu Gly Trp 25 Gln Val Tyr Ser Ser Ala Gln Asp Pro Asp Gly Arg Gly Ile Cys Thr 35 40 Val Val Ala Pro Glu Gln Asn Leu Cys Ser Arg Asp Ala Lys Ser Arg 55 60 Gln Leu Arg Gln Leu Leu Glu Lys Val Gln Asn Met Ser Gln Ser Ile 75 Glu Val Leu Asn Leu Arg Thr Gln Arg Asp Phe Gln Tyr Val Leu Lys 85 90 Met Glu Thr Gln Met Lys Gly Leu Lys Ala Lys Phe Arg Gln Ile 100 105 110 111

<210> 1756 <211> 74 <212> PRT <213> Homo sapiens

<400> 1756

 Met
 Leu
 Pro
 Arg
 Leu
 Val
 Leu
 Ser
 Ser
 Trp
 Pro
 Gln
 Ser
 Ile
 Phe
 Leu
 Leu
 15

 Pro
 Arg
 Phe
 Trp
 Asn
 Tyr
 Arg
 Cys
 Glu
 Pro
 Pro
 Cys
 Leu
 Ala
 Cys
 Phe

 Asp
 Ile
 Phe
 Tyr
 Ser
 Val
 Leu
 Ile
 Thr
 Asn
 Ser
 Leu
 His
 Met
 Pro
 Glu

 Asp
 Ile
 Phe
 Tyr
 Leu
 Leu
 Phe
 Arg
 Trp
 Glu
 Leu
 Glu
 Leu
 Ile
 He
 Arg
 Trp
 Glu
 Leu
 Glu
 Leu
 Glu
 Leu
 Ile
 Trp
 Glu

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<210> 1757
<211> 50
<212> PRT
<213> Homo sapiens
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<210> 1758 <211> 123 <212> PRT <213> Homo sapiens

<400> 1758 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Glu 10 Ser Val Ala Ser Tyr Glu Leu Phe Gln Pro Pro Ser Val Ser Val Ser 20 25 Pro Gly Gln Thr Ala Thr Phe Thr Cys Ser Gly Asp Asp Leu Gly Asn 40 Lys Tyr Ile Cys Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Val Val 55 Leu Met Tyr Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe 70 75 Ser Gly Ser Asn Ser Gly Ser Thr Ala Thr Leu Thr Ile Ser Gly Thr 90 85 Gln Ala Thr Asp Glu Ala Leu Tyr Phe Cys Gln Ala Trp Asp Thr Asn 105 Gly Ala Val Phe Gly Gly Gly Thr Gln Leu Thr 120

<210> 1759 <211> 75 <212> PRT <213> Homo sapiens

Pro Cys Leu Tyr Leu Glu Gly Asn Pro Thr * 65 70 74

<210> 1760 <211> 122 <212> PRT

<213> Homo sapiens

<400> 1760 Met Arg Leu Pro Asp Val Gln Leu Trp Leu Val Leu Leu Trp Ala Leu 5 10 Val Arg Ala Gln Gly Thr Gly Ser Val Cys Pro Ser Cys Gly Gly Ser 25 Lys Leu Ala Pro Gln Ala Glu Arg Ala Leu Val Leu Glu Leu Ala Lys 35 40 Gln Gln Ile Leu Asp Gly Leu His Leu Thr Ser Arg Pro Arg Ile Thr 55 60 His Pro Pro Pro Gln Ala Ala Leu Thr Arg Ala Leu Arg Arg Leu Gln 70 75 Pro Gly Ser Val Ala Pro Gly Asn Gly Glu Glu Val Ile Ser Phe Ala 90 Thr Val Thr Asp Ser Thr Ser Ala Tyr Ser Ser Leu Leu Thr Phe His 100 105 Leu Ser Thr Pro Arg Ser His His Leu Tyr 120

<210> 1761 <211> 123 <212> PRT <213> Homo sapiens

<400> 1761 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu Leu Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp Glu Ser 20 25 Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val Lys Asp His 40 Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu 55 60 Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Asp Ser Leu Lys 70 Ser Gln Glu Gly Glu Ser Val Thr Glu Asp Ile Ser Phe Leu Glu Ser 85 90 Pro Asn Pro Glu Asn Lys Asp Tyr Glu Glu Pro Lys Lys Val Arg Lys 105 Pro Gly Ser Leu Asp Ile Phe Leu Ala Phe * 120 122

<210> 1762 <211> 145

<212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(145) <223> Xaa = any amino acid or nothing

<400> 1762 Met Ala Leu Ala Ala Leu Met Ile Ala Leu Gly Ser Leu Gly Leu His 10 Thr Trp Gln Ala Gln Ala Val Pro Thr Ile Leu Pro Leu Gly Leu Ala 25 Pro Asp Thr Phe Asp Asp Thr Tyr Val Gly Cys Ala Glu Glu Met Glu 40 Glu Lys Ala Ala Pro Leu Leu Lys Glu Glu Met Ala His His Ala Leu 55 Leu Arg Glu Ser Trp Glu Ala Ala Gln Glu Thr Trp Glu Asp Lys Arg 70 75 Arg Gly Leu Thr Leu Pro Pro Gly Phe Lys Ala Gln Asn Gly Ile Ala 85 90 Ile Met Val Tyr Thr Asn Ser Ser Asn Thr Leu Tyr Trp Glu Leu Asn 100 105 Xaa Ala Val Arg Thr Gly Gly Ser Arg Glu Leu Tyr Met Arg His 120 125 Phe Pro Phe Lys Ala Leu His Phe Tyr Leu Ile Arg Ala Leu Gln Leu 135 Leu 145

<210> 1763 <211> 257 <212> PRT <213> Homo sapiens

<400> 1763 Met Lys Arg Glu Arg Gly Ala Leu Ser Arg Ala Ser Arg Ala Leu Arg 10 Leu Ala Pro Phe Val Tyr Leu Leu Leu Ile Gln Thr Asp Pro Leu Glu 25 Gly Val Asn Ile Thr Ser Pro Val Arg Leu Ile His Gly Thr Val Gly Lys Ser Ala Leu Leu Ser Val Gln Tyr Ser Ser Thr Ser Ser Asp Arg 55 Pro Val Val Lys Trp Gln Leu Lys Arg Asp Lys Pro Val Thr Val Val 70 75 Gln Ser Ile Gly Thr Glu Val Ile Gly Thr Leu Arg Pro Asp Tyr Arg 90 Asp Arg Ile Arg Leu Phe Glu Asn Gly Ser Leu Leu Leu Ser Asp Leu 105 Gln Leu Ala Asp Glu Gly Thr Tyr Glu Val Glu Ile Ser Ile Thr Asp 120 Asp Thr Phe Thr Gly Glu Lys Thr Ile Asn Leu Thr Val Asp Val Pro 135 Ile Ser Arg Pro Gln Val Leu Gly Ala Ser Thr Thr Val Leu Glu Leu 150 155

 Ser
 Glu
 Ala
 Phe
 Thr
 Leu
 Asn
 Cys
 Ser
 His
 Glu
 Asn
 Gly
 Thr
 Lys
 Pro

 Ser
 Tyr
 Thr
 Trp
 Leu
 Lys
 Asp
 Gly
 Lys
 Pro
 Leu
 Leu
 Asp
 Ser
 Arg

 Met
 Leu
 Leu
 Ser
 Pro
 Asp
 Gln
 Lys
 Val
 Leu
 Thr
 Int
 Arg
 Val
 Leu

 Met
 Glu
 Asp
 Asp
 Leu
 Tyr
 Ser
 Cys
 Val
 Val
 Glu
 Asn
 Pro
 Ite
 Asn

 210
 Leu
 Tyr
 Ser
 Lys
 Ite
 Thr
 Glu
 Asn
 Pro
 Ite
 Asn
 Ite
 Arg
 Ite
 Arg
 Ite
 Arg
 Ite
 Ite

<210> 1764 <211> 166 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(166) <223> Xaa = any amino acid or nothing

<400> 1764 Met Ala Leu Lys Val Leu Leu Glu Glu Glu Lys Thr Phe Phe Thr Leu 5 .10 Leu Val Leu Leu Gly Tyr Leu Ser Cys Lys Val Thr Cys Glu Ser Gly 25 Asp Cys Arg Gln Gln Glu Phe Arg Asp Arg Ser Gly Asn Cys Val Pro 40 Cys Asn Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 55 Gly Tyr Gly Glu Asp Ala Gln Cys Val Thr Cys Arg Leu His Arg Phe 70 75 Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Leu Asp Cys Ala 85 90 Val Val Asn Arg Phe Gln Lys Ala Asn Cys Ser Ala Thr Ser Asp Ala 100 105 110 Ile Cys Gly Asp Cys Leu Pro Gly Phe Tyr Arg Lys Thr Lys Leu Val 115 120 125 Gly Phe Gln Asp Met Glu Trp Trp Xaa Ala Leu Val Gly Arg Thr Pro 140 130 135 Phe Leu Pro Ser Leu Tyr Gly Asn Pro Ala Leu Gly Cys Gln Pro Arg 150 155 Val Gln Thr Phe Gly Glu 165 166

<210> 1765 <211> 90 <212> PRT <213> Homo sapiens

<400> 1765 Met Ser Cys Ser Cys Pro Pro Cys Phe Phe Thr Leu Phe Leu His Ser 10 Ile Cys Gln Asp Ile Ser Trp Phe His Pro Gln Thr Pro Thr Leu Asp 20 25 Ser Leu Leu Asn Trp Ile Asp Asp Leu Ile Phe Tyr Gly Thr Leu Tyr 40 45 Asn Phe Phe Pro Glu Glu Thr Pro Leu Phe Thr Phe Leu Leu Thr Leu 55 60 Tyr Leu Ser Leu Leu Leu Trp Leu Pro Gly Met Ala Ala Leu Pro 70 Leu Ala Val Met Pro Asn Tyr Leu Tyr Lys 85

<210> 1766 <211> 57 <212> PRT <213> Homo sapiens

<210> 1767 <211> 63 <212> PRT <213> Homo sapiens

<210> 1768 <211> 174 <212> PRT <213> Homo sapiens

<400> 1768

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile 10 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys 40 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr 85 90 Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly 100 105 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys 120 125 Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn 135 Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys 150 155 Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Asp Val * 165 170

<210> 1769 <211> 78

<213> Homo sapiens

<400> 1769

<212> PRT

 Met
 Leu
 Cys
 Leu
 Phe
 Ala
 Cys
 Ser
 Arg
 Phe
 Ala
 Cys
 Ser
 Arg
 Phe
 Ala
 Ser
 Leu
 Thr
 Leu
 His
 His
 His
 His
 His
 Ile
 Phe
 Lys
 Val

 His
 Pro
 Ser
 Cys
 Ser
 Val
 Ser
 Val
 Pro
 Pro
 Pro
 Phe
 Ser
 Leu
 Leu
 Ser

 Ser
 Ala
 Arg
 Cys
 Arg
 Pro
 Arg
 Cys
 Ala
 His
 Leu
 Phe
 Ala
 Leu
 Leu

 Met
 Gly
 Pro
 Cys
 Leu
 Ser
 Thr
 Phe
 Gly
 Arg
 Leu
 *

 65
 Fro
 Cys
 Leu
 Gly
 Leu
 Ser
 Thr
 Phe
 Gly
 Arg
 Leu
 *

<210> 1770 <211> 149 <212> PRT <213> Homo sapiens

<400> 1770

 Met Leu Val Thr Leu Gly Leu Leu Thr Ser Phe Phe Ser Phe Leu Tyr

 1
 5
 10
 15

 Met Val Ala Pro Ser Ile Arg Lys Phe Phe Ala Gly Gly Val Cys Arg
 20
 25

 Thr Asn Val Gln Leu Pro Gly Lys Val Val Val Ile Thr Gly Ala Asn
 35
 40

 Thr Gly Ile Gly Lys Glu Thr Ala Arg Glu Leu Ala Ser Arg Gly Ala

<210> 1771 <211> 76 <212> PRT <213> Homo sapiens

<400> 1771

 Met
 Met
 Thr
 Leu
 Leu
 Arg
 Arg
 Glu
 Arg
 Phe
 Pro
 Gly
 Ile
 Thr
 Phe

 1
 5
 6
 6
 10
 10
 10
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<210> 1772 <211> 128 <212> PRT <213> Homo sapiens

<400> 1772

Met Gly Ser Thr Lys His Trp Gly Glu Trp Leu Leu Asn Leu Lys Val 10 Ala Pro Ala Gly Val Phe Gly Val Ala Phe Leu Ala Arg Val Ala Leu 20 Val Phe Tyr Gly Val Phe Gln Asp Arg Thr Leu His Val Arg Tyr Thr 35 40 Asp Ile Asp Tyr Gln Val Phe Thr Asp Ala Ala Arg Phe Val Thr Glu 55 60 Gly Arg Ser Pro Tyr Leu Arg Ala Thr Tyr Arg Tyr Thr Pro Leu Leu 70 75 Gly Trp Leu Leu Thr Pro Asn Ile Tyr Leu Ser Glu Leu Phe Gly Lys 90 Phe Leu Phe Ile Ser Cys Asp Leu Leu Thr Ala Phe Leu Leu Tyr Arg 105 Leu Leu Leu Lys Gly Leu Gly Arg Arg Gln Ala Cys Gly Tyr Cys 120

<210> 1773 <211> 614 <212> PRT <213> Homo sapiens

<400> 1773 Met Gly Ala Leu Arg Pro Thr Leu Leu Pro Pro Ser Leu Pro Leu Leu 10 Leu Leu Met Leu Gly Met Gly Cys Trp Ala Arg Glu Val Leu Val 25 Pro Glu Gly Pro Leu Tyr Arg Val Ala Gly Thr Ala Val Ser Ile Ser 40 Cys Asn Val Thr Gly Tyr Glu Gly Pro Ala Gln Gln Asn Phe Glu Trp 55 Phe Leu Tyr Arg Pro Glu Ala Pro Asp Thr Ala Leu Gly Ile Val Ser 70 75 Thr Lys Asp Thr Gln Phe Ser Tyr Ala Val Phe Lys Ser Arg Val Val 85 90 Ala Gly Glu Val Gln Val Gln Arg Leu Gln Gly Asp Ala Val Val Leu 105 Lys Ile Ala Arg Leu Gln Ala Gln Asp Ala Gly Ile Tyr Glu Cys His 120 125 Thr Pro Ser Thr Asp Thr Arg Tyr Leu Gly Ser Tyr Ser Gly Lys Val 135 140 Glu Leu Arg Val Leu Pro Asp Val Leu Gln Val Ser Ala Ala Pro Pro 150 155 Gly Pro Arg Gly Arg Gln Ala Pro Thr Ser Pro Pro Arg Met Thr Val 165 170 His Glu Gly Gln Glu Leu Ala Leu Gly Cys Leu Ala Arg Thr Ser Thr 180 185 190 Gln Lys His Thr His Leu Ala Val Ser Phe Gly Arg Ser Val Pro Glu 200 205 Ala Pro Val Gly Arg Ser Thr Leu Gln Glu Val Val Gly Ile Arg Ser 215 220 Asp Leu Ala Val Glu Ala Gly Ala Pro Tyr Ala Glu Arg Leu Ala Ala 230 235 Gly Glu Leu Arg Leu Gly Lys Glu Gly Thr Asp Arg Tyr Arg Met Val 250 245 Val Gly Gly Ala Gln Ala Gly Asp Ala Gly Thr Tyr His Cys Thr Ala 265 270 Ala Glu Trp Ile Gln Asp Pro Asp Gly Ser Trp Ala Gln Ile Ala Glu 280 Lys Arg Ala Val Leu Ala His Val Asp Val Gln Thr Leu Ser Ser Gln 295 300 Leu Ala Val Thr Val Gly Pro Gly Glu Arg Arg Ile Gly Pro Gly Glu 310 315 Pro Leu Glu Leu Leu Cys Asn Val Ser Gly Ala Leu Pro Pro Ala Gly 325 330 Arg His Ala Ala Tyr Ser Val Gly Trp Glu Met Ala Pro Ala Gly Ala 340 345 Pro Gly Pro Gly Arg Leu Val Ala Gln Leu Asp Thr Glu Gly Val Gly 360 Ser Leu Gly Pro Gly Tyr Glu Gly Arg His Ile Ala Met Glu Lys Val

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375
Ala Ser Arg Thr Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp
                 390
                                    395
Ala Gly Thr Tyr Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly
              405
                                410
Thr Arg Leu Arg Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val
          420
                             425
                                               430
His Val Arg Glu Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala
                         440
Gly Gly Thr Val Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile
                     455
                                        460
Ser Val Arg Gly Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp
                  470
                                   475
Val Glu Arg Pro Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu
              485
                               490
Val Gly Gly Val Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro
                            505
Gly Gly Pro Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg
                         520
                                           525
Leu Arg Leu His Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys
                     535
Ala Pro Ser Ala Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala
                 550
                                    555
Gly Ser Ala Arg Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala
                                570
             565 .
Leu Asp Thr Leu Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu
          580
                            585
Val Thr Gly Ala Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys
    595
                         600
Arg Leu Arg Lys Arg *
   610 613
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<210> 1774 <211> 156 <212> PRT <213> Homo sapiens

<400> 1774 Met Glu Ala Leu Thr Leu Trp Leu Leu Pro Trp Ile Cys Gln Cys Val ' 5 Ser Val Arg Ala Asp Ser Ile Ile His Ile Gly Ala Ile Phe Glu Glu 25 Asn Ala Ala Lys Asp Asp Arg Val Phe Gln Leu Ala Val Ser Asp Leu 40 Ser Leu Asn Asp Asp Ile Leu Gln Ser Glu Lys Ile Thr Tyr Ser Ile 55 Lys Val Ile Glu Ala Asn Asn Pro Phe Gln Ala Val Gln Glu Ala Cys 75 Asp Leu Met Thr Gln Gly Ile Leu Ala Leu Val Thr Ser Thr Gly Cys Ala Ser Ala Asn Ala Leu Gln Ser Leu Thr Asp Ala Met His Ile Pro 105 His Leu Phe Val Gln Arg Asn Pro Gly Gly Ser Pro Arg Thr Ala Cys 120 125 His Leu Asn Pro Ser Pro Asp Gly Glu Ala Tyr Thr Leu Ala Ser Arg

Pro Pro Val Arg Leu Asn Asp Val Met Leu Arg Leu 145 150 155

<210> 1775 <211> 896 <212> PRT <213> Homo sapiens

<400> 1775

Met Gln Lys Ala Ser Val Leu Leu Phe Leu Ala Trp Val Cys Phe Leu 10 Phe Tyr Ala Gly Ile Ala Leu Phe Thr Ser Gly Phe Leu Leu Thr Arg 20 Leu Glu Leu Thr Asn His Ser Ser Cys Gln Glu Pro Pro Gly Pro Gly 35 40 Ser Leu Pro Trp Gly Ser Gln Gly Lys Pro Gly Ala Cys Trp Met Ala 55 Ser Arg Phe Ser Arg Val Val Leu Val Leu Ile Asp Ala Leu Arg Phe 70 75 Asp Phe Ala Gln Pro Gln His Ser His Val Pro Arg Glu Pro Pro Val 85 90 Ser Leu Pro Phe Leu Gly Lys Leu Ser Ser Leu Gln Arg Ile Leu Glu 105 Ile Gln Pro His His Ala Arg Leu Tyr Arg Ser Gln Val Asp Pro Pro 120 125 Thr Thr Thr Met Gln Arg Leu Lys Ala Leu Thr Thr Gly Ser Leu Pro 135 140 Thr Phe Ile Asp Ala Gly Ser Asn Phe Ala Ser His Ala Ile Val Glu 150 155 Asp Asn Leu Ile Lys Gln Leu Thr Ser Ala Gly Arg Arg Val Val Phe 165 170 Met Gly Asp Asp Thr Trp Lys Asp Leu Phe Pro Gly Ala Phe Ser Lys 180 185 Ala Phe Phe Pro Ser Phe Asn Val Arg Asp Leu Asp Thr Val Asp 195 200 Asn Gly Ile Leu Glu His Leu Tyr Pro Thr Met Asp Ser Gly Glu Trp 215 220 Asp Val Leu Ile Ala His Phe Leu Gly Val Asp His Cys Gly His Lys 230 235 His Gly Pro His His Pro Glu Met Ala Lys Lys Leu Ser Gln Met Asp 245 250 Gln Val Ile Gln Gly Leu Val Glu Arg Leu Glu Asn Asp Thr Leu Leu 265 260 Val Val Ala Gly Asp His Gly Met Thr Thr Asn Gly Asp His Gly Gly 280 Asp Ser Glu Leu Glu Val Ser Ala Ala Leu Phe Leu Tyr Ser Pro Thr 295 300 Ala Val Phe Pro Ser Thr Pro Pro Glu Glu Pro Glu Val Ile Pro Gln 310 315 Val Ser Leu Val Pro Thr Leu Ala Leu Leu Leu Gly Leu Pro Ile Pro 325 330 Phe Gly Asn Ile Gly Glu Val Met Ala Glu Leu Phe Ser Gly Gly Glu 345 350 Asp Ser Gln Pro His Ser Ser Ala Leu Ala Gln Ala Ser Ala Leu His 360 Leu Asn Ala Gln Gln Val Ser Arg Phe Phe His Thr Tyr Ser Ala Ala

| ٠. | 370 | | | | | 375 | | | | | 380 | | 1 | | |
|------------|-------|----------|-----|----------|-------------|--------------|-------------|------------|-------|--------|----------|--------------------------------|----------|--------|--------------|
| Thr | Gln | Asp | Leu | Gln | Ala | Lys | Glu | Leu | His | Gln | . Leu | Gln | Asn | Leu | Phe |
| 385 | | | | | 390 | | | | | 395 | | | | | 400 |
| Ser | Lys | Ala | Ser | Ala | Asp | Tyr | Gln | Trp | Leu | Leu | Gln | Ser | Pro | Lys | Gly |
| | | | | 405 | | | | | 410 | | | | | 415 | _ |
| Ala | Glu | Ala | Thr | Leu | Pro | Thr | Val | Ile | Ala | Glu | Leu | Gln | Gln | Phe | Leu |
| | | | 420 | | | | | 425 | | | | | 430 | | |
| Ara | Glv | Ala | | | Met | Cvs | Tle | | | רבייון | Δla | Δνα | | | T.e.11 |
| 3 | 1 | 435 | | | | -12 | 440 | | | ~~_ | | 445 | | | пси |
| va1 | 7/200 | | | G117 | Gly | mh~ | | | T ass | 77- | 71~ | | | Db.c | T1 - |
| var | 450 | MEC | W.a | GLY | GIY | | | neu | пеп | Ата | | | Cys | Pile | тте |
| C | | 7 | 22- | a | ~ 1- | 455 | | -7. | | | 460 | | _ | | _ |
| | ьeu | Leu | Ala | ser | Gln | | Ата | тте | ser | | | Phe | Pro | Pne | |
| 465 | _ | _ | _ | | 470 | | | | _ | 475 | | | | _ | 480 |
| Pro | Leu | Leu | Leu | Thr | Pro | Val | Ala | Trp | Gly | Leu | Val | Gly | Ala | Ile | Ala |
| | | | | 485 | | | | | 490 | | | | | 495 | |
| Tyr | Ala | Gly | Leu | Leu | Gly | Thr | Ile | Glu | Leu | Lys | Leu | Asp | Leu | Val | Leu |
| | | | 500 | | | | | 505 | | | | | 510 | | • |
| Leu | Gly | Ala | Val | Ala | Ala | Val | Ser | Ser | Phe | Leu | Pro | Phe | Leu | Tro | Lvs |
| | _ | 515 | | | | | 520 | | | | | 525 | | | 2 |
| Ala | Tim | Ala | Glv | Tro | Gly | Ser | | Δrσ | Pro | T.e.11 | Δla | | T.e.11 | Dhe | Dro |
| | 530 | | , | | , | 535 | | 9 | + - 0 | | 540 | 1111 | LCu | 1.116 | 110 |
| Tla | | Glaz | Bro | 37-7 | Leu | | | T 011 | T 011 | nho | | T | 77- | **- 7 | Db |
| 545 | 110 | CLY | 110 | Val | 550 | neu | пеп | пеп | Deu | | Arg | neu | MIA | val | |
| | | 3 | C | Dla a | | 77-7 | 77. | ~ 1 | * 7 - | 555 | 21- | | | -1. | 560 |
| Pile | Ser | Asp | ser | | Val | vai | ALA | GIU | | Arg | ALA | Thr | Pro | | Leu |
| _ | | _ | | 565 | _ | _ | _ | | 570 | _ | | _ | | 575 | |
| Leu | GTA | Ser | | Ile | Leu | Leu | Leu | | | Gln | Leu | His | Trp | Glu | Gly |
| | | | 580 | | | | | 585 | | | | | 590 | | |
| Gln | Leu | Leu | Pro | Pro | Lys | Leu | Leu | Thr | Met | Pro | Arg | Leu | Gly | Thr | Ser |
| | | 595 | | | | | 600 | | | | | 605 | | | |
| Ala | Thr | Thr | Asn | Pro | Pro | Arg | His | Asn | Gly | Ala | Tyr | Ala | Leu | Arq | Leu |
| | 610 | | | | | 615 | | | _ | | 620 | | | ~ | |
| Gly | Ile | Glv | Leu | Leu | Leu | Cvs | Thr | Arg | Leu | Ala | Glv | T ₁ e ₁₁ | Phe | His | Δνα |
| 625 | | | | | 630 | -2 - | | 3 | | 635 | 1 | | | | 640 |
| | Pro | Glu | Glu | Thr | Pro | V=1 | Care | Hic | Ser | | Pro | m-m | T-011 | 802 | |
| -1- | | | | 645 | | | C.J.D | | 650 | 001 | 110 | 115 | пеп | 655 | FIU |
| T.611 | 777 | e | Mot | | Gly | <i>a</i> 1 | 7 | *7- | | 7 | T | Ш | 6 | | ~ 7 - |
| Бец | AIA | Ser | | val | GIY | GIY | ALG | | nys | ASII | neu | rrp | _ | GTĀ | ALA |
| ~ | | - 1 - | 660 | | | | _ | 665 | | | - | _ | 670 | _ | _ |
| Cys | vaı | | Ата | Leu | Val | Ala | | Leu | Ala | Ala | Val | - | Leu | Trp | Leu |
| _ | | 675 | | | | | 680 | | | | | 685 | | | |
| Arg | Arg | Tyr | Gly | Asn | Leu | Lys | Ser | Pro | Glu | Pro | Pro | Met | Leu | Phe | Val |
| | 690 | | | | | 695 | | | | | 700 | | | | |
| Arg | Trp | Gly | Leu | Pro | Leu | Met | Ala | Leu | Gly | Thr | Ala | Ala | Tyr | Trp | Ala |
| 705 | | | | | 710 | | | | | 715 | | | _ | _ | 720 |
| Leu | Ala | Ser | Gly | Ala | Asp | Glu | Ala | Pro | Pro | Arq | Leu | Arq | Val | Leu | Val |
| | | | - | 725 | - | | | | 730 | | | 3 | | 735 | |
| Ser | Glv | Ala | Ser | | Val | Len | Pro | Ara | | Va I | Δla | Glv | T.e11 | | Δla |
| | 1 | | 740 | | | | | 745 | n_u | V CA.L | n.a | GLY | | ATG | ліа |
| 802 | C111 | T 011 | | T 011 | T 011 | T | FTInese | | D | 77-7 | mla | 77 T | 750 | 77-7 | - |
| SET | GTA | | ALA | пеп | Leu | neu | | гÀг | PIO | vaı | THE | | ьeп | Val | гАа |
| | | 755 | | | _ | _ | 760 | | | _ | | 765 | | | |
| Ala | Gly | Ala | GTĀ | Ala | Pro | Arg | Thr | Arg | Thr | Val | Leu | Thr | Pro | Phe | Ser |
| | 770 | | | | | 775 | | | | | 780 | | | | |
| ${	t Gly}$ | Pro | Pro | Thr | Ser | ${\tt Gln}$ | Ala | Asp | Leu | Asp | Tyr | Val | Val | Pro | Gln | Ile |
| 785 | | | | | 790 | | | | | 795 | | | | | 800 |
| Tyr | Arg | His | Met | Gln | Glu | Glu | Phe | Arq | Glv | Arq | Leu | Glu | Arq | Thr | Lvs |
| _ | _ | | | 805 | | | | | 810 | - | | / | | 815 | - • - |
| Ser | Gln | Glv | Pro | | Thr | Val | Ala | Ala | | Gln | Len | Glv | Ser | | ጥጉ |
| | | 1 | 820 | | | | | 825 | -1- | ~ | | 1 | 830 | | ~1~ |
| Ser | Δla | Δla | | ٧a٦ | Thr | 2 1 = | T.en | | Len | Len | בומ | Dhe | | T.e.11 | T.011 |
| | | 835 | | - 44 | | | | | Jeu | neu | -ra | | | Ten | חבת |
| | | 033 | | | | | 840 | | | | | 845 | | | |

<210> 1776 <211> 178 <212> PRT <213> Homo sapiens

<400> 1776 Met Trp Ala Cys Trp Cys Val Leu Gly Thr Pro Gly Val Ala Met Val 5 10 Leu Leu His Thr Thr Ile Ser Phe Cys Val Ala Gln Phe Arg Ser Gln 25 30 Leu Leu Thr Trp Leu Cys Ser Leu Leu Leu Leu Ser Thr Leu Arg Leu 40 Gln Gly Val Glu Glu Val Lys Arg Arg Trp Tyr Lys Thr Glu Asn Glu 55 Tyr Tyr Leu Leu Gln Phe Thr Leu Thr Val Arg Cys Leu Tyr Tyr Thr 70 75 Ser Phe Ser Leu Glu Leu Cys Trp Gln Gln Leu Pro Ala Ala Ser Thr 90 Ser Tyr Ser Phe Pro Trp Met Leu Ala Tyr Val Phe Tyr Tyr Pro Val 100 105 110 Leu His Asn Gly Pro Ile Leu Ser Phe Ser Glu Phe Ile Lys Gln Arg 120 125 Ser Gln Trp Ser Asn Arg Glu Phe Gly Met Glu Val Glu Ser Lys Gly 135 140 Pro Gly Ala His Pro Pro Gly Phe Glu Ser Leu Leu Cys Phe Gly Leu 150 155 Arg Val Leu Ala Glu Leu Leu Thr Leu Leu Met Pro Gln Ser Ser Tyr 165 Gln

<210> 1777 <211> 59 <212> PRT <213> Homo sapiens

177

50 55 59

<210> 1778 <211> 137 <212> PRT <213> Homo sapiens

<400> 1778 Met Val Ala Pro Gly Leu Val Leu Gly Leu Val Leu Pro Leu Ile Leu 10 Trp Ala Asp Arg Ser Ala Gly Ile Gly Phe Arg Phe Ala Ser Tyr Ile 25 Asn Asn Asp Met Val Leu Gln Lys Glu Pro Ala Gly Ala Val Ile Trp 35 Gly Phe Gly Thr Pro Gly Ala Thr Val Thr Val Thr Leu Arg Gln Gly 55 Gln Glu Thr Ile Met Lys Lys Val Thr Ser Val Lys Ala His Ser Asp 70 75 Thr Trp Met Val Val Leu Asp Pro Met Lys Pro Gly Gly Pro Phe Glu 90 Val Met Ala Gln Gln Thr Leu Glu Lys Ile Asn Phe Thr Leu Arg Val 100 105 110 His Asp Val Leu Phe Gly Asp Val Trp Leu Cys Ser Gly Gln Ser Asn 120 Met Gln Met Thr Val Leu Gln Ile Phe 135

<210> 1779 <211> 65 <212> PRT <213> Homo sapiens

 Ala
 Leu
 Phe
 Leu
 Asp
 Glu
 Ser
 Trp
 Pro
 Gln
 Trp
 Arg
 Phe
 Ala

 Ala
 Gly
 Leu
 Ala
 Leu
 Ser
 Phe
 Gly
 Pro
 Ala
 Trp
 Lys
 Phe
 Leu

 Ala
 Gly
 Leu
 Ala
 Leu
 Ser
 Phe
 Gly
 Pro
 Ala
 Trp
 Lys
 Phe
 Leu

 Ser
 Val
 Gln
 Arg
 Val
 Ile
 Pro
 Trp
 Leu
 Trp
 Ala
 Ala
 Lys
 Pro

 Leu
 Gly
 Pro
 Leu
 Arg
 Leu
 Arg
 Leu
 Arg
 Val
 Gly
 Val

 Leu
 Gly
 Pro
 Leu
 Arg
 L

<210> 1780 <211> 53 <212> PRT <213> Homo sapiens

<400> 1780

<210> 1781 <211> 109 <212> PRT <213> Homo sapiens

<400> 1781 Met Met His Asn Ile Ile Val Lys Glu Leu Ile Val Thr Phe Phe Leu 1 5 10 Gly Ile Thr Val Val Gln Met Leu Ile Ser Val Thr Gly Leu Lys Gly 25 Val Glu Ala Gln Asn Gly Ser Glu Ser Glu Val Phe Val Gly Lys Tyr 40 Glu Thr Leu Val Phe Tyr Trp Pro Ser Leu Leu Cys Leu Ala Phe Leu 55 60 Leu Gly Arg Phe Leu His Met Phe Val Lys Ala Leu Arg Val His Leu 70 75 Gly Trp Glu Leu Gln Val Glu Glu Lys Ser Val Leu Glu Val His Gln 85 90 Gly Glu His Val Lys Gln Leu Leu Arg Ile Pro Arg Pro 100 105

<210> 1782 <211> 58 <212> PRT <213> Homo sapiens

<210> 1783 <211> 102 <212> PRT <213> Homo sapiens

<210> 1784 <211> 243 <212> PRT <213> Homo sapiens

242

<400> 1784 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val 5 10 Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro 25 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu 55 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly 70 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly 90 Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn 100 105 Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln 120 125 Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu 135 140 Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His 150 155 Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg 170 Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu 180 185 Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr 200 His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His Ser Arg 215 220 Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg 235 Gln Leu *

<210> 1785 <211> 158 <212> PRT <213> Homo sapiens

<400> 1785 Met Lys Ala Leu Leu Leu Val Leu Pro Trp Leu Ser Pro Ala Asn 10 Tyr Ile Asp Asn Val Gly Asn Leu His Phe Leu Tyr Ser Glu Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys Arg Arg Ser 35 40 Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr Ala Thr Ala Pro 55 Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser Leu Met Thr Asp Glu 70 75 Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser Ser Ala Glu Asp Gly Gln 90 Pro Ala Ile Ser Pro Val Asp Ser Gly Arg Ser Asn Arg Thr Arg Ala 100 105 Arg Pro Phe Glu Arg Ser Thr Ile Ile Ser Arg Ser Phe Lys Lys Ile . 115 120 125 Asn Arg Ala Leu Ser Val Leu Arg Arg Thr Lys Ser Gly Ser Ala Val 135 140 Ala Asn His Ala Asp Gln Gly Arg Glu Asn Ser Glu Asn Thr 150

<210> 1786 <211> 142 <212> PRT <213> Homo sapiens

<400> 1786 Met Glu Ser Ala Val Arg Val Glu Ser Gly Val Leu Val Gly Val Val 10 Cys Leu Leu Ala Cys Pro Ala Thr Ala Thr Gly Pro Glu Val Ala Gln Pro Glu Val Asp Thr Thr Leu Gly Arg Val Arg Gly Arg Gln Val 40 Gly Val Lys Gly Thr Asp Arg Leu Val Asn Val Phe Leu Gly Ile Pro 55 Phe Ala Gln Pro Pro Leu Gly Pro Asp Arg Phe Ser Ala Pro His Pro 70 75 Ala Gln Pro Trp Glu Gly Val Arg Asp Ala Ser Thr Ala Pro Pro Met 85 90 Cys Leu Gln Asp Val Glu Ser Met Asn Ser Ser Arg Phe Val Leu Asn 105 110 Gly Lys Gln Gln Ile Phe Ser Val Ser Glu Asp Cys Leu Val Leu Asn 120 Val Tyr Ser Pro Ala Glu Val Pro Ala Gly Ser Gly Arg Pro 135

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<210> 1787
<211> 120
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(120)
<223> Xaa = any amino acid or nothing
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<400> 1787 Met Ala Leu Thr Gly Tyr Ser Trp Leu Leu Leu Ser Ala Thr Phe Leu 10 Asn Val Gly Ala Glu Ile Ser Ile Thr Leu Glu Pro Ala Gln Pro Ser 25 Glu Gly Asp Asn Val Thr Leu Val Val His Gly Leu Ser Gly Glu Leu 35 Leu Ala Tyr Ser Trp Tyr Ala Gly Pro Thr Leu Ser Val Ser Tyr Leu 55 Val Ala Ser Tyr Ile Val Ser Thr Gly Asp Glu Thr Pro Gly Pro Ala 70 75 His Thr Xaa Arg Glu Ala Val Arg Pro Asp Gly Ser Leu Asp Ile Gln 90 Gly Ile Leu Pro Arg His Ser Ser Thr Tyr Ile Leu Gln Thr Phe Asn Arg Gln Leu Gln Thr Glu Val Gly 115

<210> 1788 <211> 68 <212> PRT <213> Homo sapiens

<210> 1789 <211> 133 <212> PRT <213> Homo sapiens

<400> 1789
Met Ala Val Val Ile Arg Leu Leu Gly Leu Pro Phe Ile Ala Gly Pro
1 5 10 15

Val Asp Ile Arg His Phe Phe Thr Gly Leu Thr Ile Pro Asp Gly Gly 25 Val His Ile Ile Gly Glu Ile Gly Glu Ala Phe Ile Ile Phe Ala Thr Asp Glu Asp Ala Arg Arg Ala Ile Ser Arg Ser Gly Gly Phe Ile 55 Lys Asp Ser Ser Val Glu Leu Phe Leu Ser Ser Lys Ala Glu Met Gln 70 Lys Thr Ile Glu Met Lys Arg Thr Asp Arg Val Gly Arg Gly Arg Pro 90 Gly Ser Gly Thr Ser Gly Val Asp Ser Leu Ser Asn Phe Ile Glu Ser 105 Val Lys Glu Glu Ala Ser Asn Ser Gly Tyr Gly Ser Ser Ile Asn Gln Asp Ala Gly Phe His 133

<210> 1790 <211> 82 <212> PRT <213> Homo sapiens

<400> 1790 Met Ala Ala Trp Gly Phe Cys Phe Ala Val Ser Ala Leu Val Val Ala 10 Cys Glu Phe Thr Arg Leu His Gly Cys Leu Arg Leu Ser Trp Gly Asn Phe Thr Ala Ala Phe Ala Met Leu Ala Thr Leu Leu Cys Ala Thr Ala Ala Val Leu Tyr Pro Leu Tyr Phe Ala Arg Arg Glu Cys Pro Pro Glu 55 60 Pro Ala Gly Cys Ala Ala Arg Asp Phe Arg Leu Ala Ala Ser Val Phe Ala Gly

<210> 1791 <211> 50 <212> PRT <213> Homo sapiens

82

<400> 1791 Met His Ala Ser Glu Gly Leu Pro Ala Leu Pro Leu Leu Ala Leu Val 10 Ser His Ser His Ser Cys Pro Pro Leu Pro Leu Gln Pro His His Leu 25 Pro Ala Ile Leu Phe Phe Leu Val Gly His Gln Leu Met Lys Cys Ile 40 Arq 49

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<210> 1792
<211> 166
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(166)
<223> Xaa = any amino acid or nothing
```

Met Leu Leu Trp Leu Leu Leu Ile Leu Thr Pro Gly Arg Glu Gln 5 10 Ser Gly Val Ala Pro Lys Ala Val Leu Leu Leu Asp Pro Pro Trp Ser 20 . 30 25 Thr Ala Phe Lys Gly Glu Lys Val Ala Leu Ile Cys Ser Ser Ile Ser 40 His Ser Leu Ala Gln Gly Asp Thr Tyr Trp Tyr His Asp Glu Lys Leu 55 Leu Lys Ile Lys His Asp Lys Ile Gln Ile Thr Glu Pro Gly Asn Tyr 70 75 Gln Cys Lys Thr Arg Gly Ser Ser Leu Ser Asp Ala Val His Val Glu 90 85 Phe Ser Pro Asp Trp Leu Ile Leu Gln Ala Leu His Pro Val Phe Glu 105 Gly Asp Asn Val Ile Leu Arg Cys Gln Gly Lys Asp Asn Lys Asn Thr 120 125 His His Lys Val Tyr Tyr Lys Asp Gly Lys Gln Xaa Ser Asn Ser Tyr 135 140 Asn Leu Glu Lys Asn Thr Val Asp Ser Val Ser Arg Asp Asn Ser Pro 150 Tyr Tyr Cys Ala Gly * 165

<210> 1793 <211> 146 <212> PRT <213> Homo sapiens

<400> 1792

<400> 1793 Met Ala Thr Ala Ala Gln Gly Pro Leu Ser Leu Leu Trp Gly Trp Leu 10 Trp Ser Glu Arg Phe Trp Leu Pro Glu Asn Val Ser Trp Ala Asp Leu 20 25 Glu Gly Pro Ala Asp Gly Tyr Gly Tyr Pro Arg Gly Arg His Ile Leu 40 Ser Val Phe Pro Leu Ala Ala Gly Ile Phe Phe Val Arg Leu Leu Phe Glu Arg Phe Ile Ala Lys Pro Cys Ala Leu Arg Ile Gly Ile Glu Asp ·70 75 Ser Gly Pro Tyr Gln Ala Gln Pro Asn Ala Ile Leu Glu Lys Val Phe 85 90 Ile Ser Ile Thr Lys Tyr Pro Asp Lys Lys Arg Leu Glu Gly Leu Ser 105 110 Lys Gln Leu Asp Trp Asn Val Arg Lys Ile Gln Cys Trp Phe Arg His

Arg Arg Asn Gln Asp Lys Pro Pro Thr Leu Thr Lys Phe Cys Glu Ser 130 135 140

Met *

<210> 1794 <211> 151 <212> PRT <213> Homo sapiens

<400> 1794

Met Glu Arg Arg Leu Leu Gly Gly Met Ala Leu Leu Leu Gln 10 Ala Leu Pro Ser Pro Leu Ser Ala Arg Ala Glu Pro Pro Gln Asp Lys 25 Glu Ala Cys Val Gly Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly His Cys Cys Gly Gln Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp 55 Trp Phe Trp Leu Val Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys 70 Val Cys His His Arg Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg 90 Gln His Glu Ile Asn Leu Ile Ala Tyr Arg Glu Ala His Asn Tyr Ser 100 105 Ala Leu Pro Phe Tyr Phe Arg Phe Leu Pro Asn Tyr Leu Leu Pro Pro 120 125 Tyr Glu Glu Val Val Asn Arg Pro Pro Thr Pro Pro Pro Pro Tyr Ser 135 Ala Phe Gln Leu Gln Gln Gln 150 151

<210> 1795 <211> 177 <212> PRT <213> Homo sapiens

<400> 1795

Met Ala Ala Leu Ala Ala Ala Lys Lys Val Trp Ser Ala Arg Arg 5 10 Leu Leu Val Leu Leu Phe Thr Pro Leu Ala Leu Leu Pro Val Val Phe 25 Ala Leu Pro Pro Lys Glu Gly Arg Cys Leu Phe Val Ile Leu Leu Met 40 Ala Val Tyr Trp Cys Thr Glu Ala Leu Pro Leu Ser Val Thr Ala Leu Leu Pro Ile Val Leu Phe Pro Phe Met Gly Ile Leu Pro Ser Asn Lys 70 75 Val Cys Pro Gln Tyr Phe Leu Asp Thr Asn Phe Leu Phe Leu Ser Gly 90 Leu Ile Met Ala Ser Ala Ile Glu Glu Trp Asn Leu His Arg Arg Ile 105 Ala Leu Lys Ile Leu Met Leu Val Gly Val Gln Pro Ala Arg Leu Ile

<210> 1796 <211> 98

<212> PRT

<213> Homo sapiens

<221> misc_feature <222> (1)...(98)

<223> Xaa = any amino acid or nothing

<400> 1796

Met His Pro Leu Pro Gly Tyr Trp Ser Cys Tyr Cys Leu Leu Leu Leu 15

Phe Ser Leu Gly Val Gln Gly Ser Leu Gly Ala Pro Ser Ala Ala Pro 20

Glu Gln Val His Leu Ser Tyr Pro Gly Glu Pro Gly Ser Met Thr Val 35

Thr Trp Thr Thr Trp Val Pro Thr Arg Ser Glu Val Gln Phe Gly Leu 50

Gln Pro Ser Gly Pro Leu Pro Leu Arg Ala Gln Gly Thr Phe Val Pro 65

Val Asp Xaa Gly Ile Leu Arg Arg Lys Leu Tyr Ile His Arg Val 95

Thr Leu

98

<210> 1797 <211> 96 <212> PRT <213> Homo sapiens

<400> 1797

Met Phe Leu Trp Leu Phe Leu Ile Leu Ser Ala Leu Ile Ser Ser Thr 5 10 Asn Ala Asp Ser Asp Ile Ser Val Glu Ile Cys Asn Val Cys Ser Cys 20 25 30 Val Ser Val Glu Asn Val Leu Tyr Val Asn Cys Glu Lys Val Ser Val 40 Tyr Arg Pro Asn Gln Leu Lys Pro Pro Trp Ser Asn Phe Tyr His Leu 55 Asn Phe Gln Asn Asn Phe Leu Asn Ile Leu Tyr Pro Asn Thr Phe Leu 70 75 Asn Phe Ser His Ala Val Ser Leu His Leu Gly Asn Asn Lys Leu Gln 90

<210> 1798 <211> 91 <212> PRT <213> Homo sapiens

<210> 1799 <211> 77 <212> PRT <213> Homo sapiens

<210> 1800 <211> 182 <212> PRT <213> Homo sapiens

40 Tyr Phe Asn Ile Phe Ser Arg Ile Leu Gly Gly Ser Gln Val Glu Lys 55 60 Gly Ser Tyr Pro Trp Gln Val Ser Leu Lys Gln Arg Gln Lys His Ile 70 75 Cys Gly Gly Ser Ile Val Ser Pro Gln Trp Val Ile Thr Ala Ala His 85 90 Cys Ile Ala Asn Arg Asn Ile Val Ser Thr Leu Asn Val Thr Ala Gly 105 Glu Tyr Asp Leu Ser Gln Thr Asp Pro Gly Glu Gln Thr Leu Thr Ile . 120 115 125 Glu Thr Val Ile Ile His Pro His Phe Ser Thr Lys Lys Pro Met Asp 135 140 Tyr Asp Ile Ala Leu Leu Lys Met Ala Gly Ala Phe Gln Phe Gly His 150 155 Phe Val Gly Pro Ile Cys Leu Pro Glu Leu Arg Glu Gln Phe Glu Ala 165 170 Gly Phe Ile Cys Thr Thr 180

<210> 1801 <211> 202 <212> PRT <213> Homo sapiens

<400> 1801 Met Thr Glu Ala Thr Phe Asp Thr Leu Arg Leu Trp Leu Ile Ile Leu 10 Leu Cys Ala Leu Arg Leu Ala Met Met Arg Ser His Leu Gln Ala Tyr 20 25 Leu Asn Leu Ala Gln Lys Cys Val Asp Gln Met Lys Lys Glu Ala Gly Arg Ile Ser Thr Val Glu Leu Gln Lys Met Val Ala Arg Val Phe Tyr 55 Tyr Leu Cys Val Ile Ala Leu Gln Tyr Val Ala Pro Leu Val Met Leu 75 70 Leu His Thr Thr Leu Leu Leu Lys Thr Leu Gly Asn His Ser Trp Gly 85 90 Ile Tyr Pro Glu Ser Ile Ser Thr Leu Pro Val Asp Asn Ser Leu Leu 105 Ser Asn Ser Val Tyr Ser Glu Leu Pro Ser Ala Glu Gly Lys Met Lys 120 125 His Asn Ala Arg Gln Gly Pro Ala Val Pro Pro Gly Met Gln Ala Tyr 135 140 Gly Ala Ala Pro Phe Glu Asp Leu Gln Leu Asp Phe Thr Glu Met Pro 150 155 Lys Cys Gly Asp Leu Ile Pro Arg Phe Gly Leu Pro Leu Arg Ile Gly 170 Ser Asp Asn Gly Leu Ala Phe Val Ala Asp Leu Val Gln Lys Thr Ala 185 Lys Trp Lys Gly Pro Gln Ile Val Val Leu 195 200

<210> 1802

<211> 172 <212> PRT <213> Homo sapiens

<400> 1802 Met Asn Asn Phe Arg Ala Thr Ile Leu Phe Trp Ala Ala Ala Trp Ala Lys Ser Gly Lys Pro Ser Gly Glu Met Asp Glu Val Gly Val Gln 25 Lys Cys Lys Asn Ala Leu Lys Leu Pro Val Leu Glu Val Leu Pro Gly 40 Gly Gly Trp Asp Asn Leu Arg Asn Val Asp Met Gly Arg Val Met Glu 55 Leu Thr Tyr Ser Asn Cys Arg Thr Thr Glu Asp Gly Gln Tyr Ile Ile Pro Asp Glu Ile Phe Thr Ile Pro Gln Lys Gln Ser Asn Leu Glu Met 85 90 Asn Ser Glu Ile Leu Glu Ser Trp Ala Asn Tyr Gln Ser Ser Thr Ser 100 105 Tyr Ser Ile Asn Thr Glu Leu Ser Leu Phe Ser Lys Val Asn Gly Lys 120 125 Phe Ser Thr Glu Phe Gln Arg Met Lys Thr Leu Gln Val Lys Asp Gln 135 140 Ala Ile Thr Thr Arg Val Gln Val Arg Asn Leu Val Tyr Thr Val Lys 145 150 155 Ile Asn Pro Thr Leu Glu Leu Ser Ser Gly Phe Arg 170

<210> 1803 <211> 158 <212> PRT <213> Homo sapiens

<400> 1803 Met Ser Leu Arg Leu Gly Pro Ala Trp Arg His Leu Thr Cys Leu Gly 10 Thr Lys His Ser Lys Ala Asn Ser Val Leu Ala Ser Gln His Ala Gly 20 25 30 Phe Phe Val Ala Gln Gly Arg Trp Ala Ile His Arg Ala Phe Ser Ser 35 40 Arg Thr Ser Pro Thr Pro Pro Arg Gly Pro Leu Leu Pro Gly Arg 55 His Pro Leu Leu Ser Arg Arg Ala Gln Ala Ile Arg Ser Ser Thr 70 75 Arg Pro Ser Leu Pro Ala His Leu Phe Lys Pro Ala Pro Ala Ile Ala 85 . 90 Leu Ile Val Ser Pro Leu Arg Phe Pro Arg Arg Thr Ser Pro Cys His 100 105 Leu Ser Gly Pro Pro Ala Pro Pro Cys Arg Thr Leu His Thr Leu Leu 120 Arg Pro Val Cys Val Val Arg Arg Thr Pro Pro Val Phe Phe Thr Ser 140 135 Phe Thr Pro Ala Arg Ala Ala Val Ala Ser His Pro Thr Pro 150 155

<210> 1804 <211> 102 <212> PRT <213> Homo sapiens

<400> 1804 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 10 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 20 25 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 35 40 45 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser 55 Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser 70 75 Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Leu 85 90 Ala Arg Val Gln Ala Leu 100

<210> 1805 <211> 54 <212> PRT <213> Homo sapiens

<210> 1806 <211> 56 <212> PRT <213> Homo sapiens

<210> 1807 <211> 47 <212> PRT <213> Homo sapiens

<210> 1808 <211> 119 <212> PRT <213> Homo sapiens

<400> 1808 Met Ala Ala Ser Leu Leu Ala Val Leu Leu Leu Leu Leu Glu Arg 5 10 Gly Met Phe Ser Ser Pro Ser Pro Pro Pro Ala Leu Leu Glu Lys Val 25 Phe Gln Tyr Ile Asp Leu His Gln Asp Glu Phe Val Gln Thr Leu Lys 40 Glu Trp Val Ala Ile Glu Ser Asp Ser Val Gln Pro Val Pro Arg Phe 55 60 Arg Gln Glu Leu Phe Arg Met Met Ala Val Ala Ala Asp Thr Leu Gln 75 Arg Leu Gly Ala Arg Val Ala Ser Val Asp Met Gly Pro Gln Gln Leu 85 90 Pro Asp Gly Gln Ser Leu Pro Ile Pro Pro Val Ile Leu Ala Glu Leu 100 105 Gly Ser Asp Pro Thr Lys Gly 115 119

<210> 1809 <211> 91 <212> PRT <213> Homo sapiens

<210> 1810 <211> 58 <212> PRT <213> Homo sapiens

<210> 1811 <211> 48 <212> PRT <213> Homo sapiens

<210> 1812 <211> 84 <212> PRT <213> Homo sapiens

Glu Asp Asn Phe Val Ala Leu Ala Thr Gly Gln Lys Gly Phe Gly Tyr 65 70 Lys Asn Ser 83

<210> 1813 <211> 46 <212> PRT <213> Homo sapiens

<400> 1813 Met Ala Ala Asp Asp Thr Ile Leu Gly Phe Arg Ala Ala Leu Leu 5 10 Ile Leu Val Ala Ala Ala Ala Leu Ser Pro Lys Val Ala Cys Arg 20 25 Val Gly Thr Val Arg Arg Glu Thr Pro Gln Pro Ser Ala 40 45 46

<210> 1814 <211> 65 <212> PRT <213> Homo sapiens

<400> 1814 Met Ile Ile Tyr Leu Thr Phe Pro Val Ala Met Phe Trp Val Ser Asn 10 Gln Ala Glu Trp Phe Glu Asp Asp Val Ile Gln Arg Lys Arg Glu Leu 20 25 Trp Pro Pro Glu Lys Leu Gln Glu Ile Glu Glu Phe Lys Glu Arg Leu 40 Arg Lys Arg Arg Glu Glu Lys Leu Leu Arg Asp Ala Gln Gln Asn Ser 55

<210> 1815 <211> 100 <212> PRT <213> Homo sapiens

<400> 1815 Met Phe Lys Ser Lys Leu Leu Asn Phe Tyr Ile Phe Val Asn Cys Met 10 Asn Phe Leu Met Leu Ser Ile Ala Ser Phe Asn Pro Phe Trp Ser Glu 25 Ile Ile Val Cys Asn Ile Gln Phe Phe Tyr Tyr Thr Leu Ser Ser Arg 35 40 Val His Val Gln Asn Val Gln Val Cys Tyr Thr Gly Ile His Val Pro 55 60 Cys Trp Phe Ala Ala Pro Ile Asn Ser Ser Phe Thr Leu Gly Ile Ser

65 70 75 80

Pro Asn Ala Ile Pro Phe Ile Val Pro His Pro Gln Thr Gly Pro Asn
85 90 95

Val Arg Cys Ser
100

<210> 1816 <211> 115 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(115) <223> Xaa = any amino acid or nothing

<400> 1816 Met Phe Cys Phe Leu Val Ser Val Leu Tyr Ser Lys Ala Lys Leu Ala 5 10 Ser Ala Cys Gly Gly Ile Ile Tyr Phe Leu Ser Tyr Val Pro Tyr Met 25 Tyr Val Ala Ile Arg Glu Glu Val Ala His Asp Lys Ile Thr Ala Phe 40 Glu Lys Cys Ile Ala Ser Leu Met Ser Thr Thr Ala Phe Gly Leu Gly 55 60 Ser Lys Tyr Phe Ala Leu Tyr Glu Val Pro Gly Val Gly Ile Gln Trp 70 75 His Thr Phe Ser Gln Ser Pro Val Glu Gly Glu Asp Leu Asn Leu Pro 85 90 Pro Pro Pro Pro Met Met Pro Ala Pro Xaa Val Val Tyr Gly Ile Leu 100 105 Thr Lys * 114

<210> 1817 <211> 144 <212> PRT <213> Homo sapiens

<400> 1817 Met Val Leu Gly Leu Leu Val Gln Ile Trp Ala Leu Gln Glu Ala Ser 5 10 Ser Leu Ser Val Gln Gln Gly Pro Asn Leu Leu Gln Val Arg Gln Gly 20 25 Ser Gln Ala Thr Leu Val Cys Gln Val Asp Gln Ala Thr Ala Trp Glu 35 · 40 Arg Leu Arg Val Lys Trp Thr Lys Asp Gly Ala Ile Leu Cys Gln Pro 55 Tyr Ile Thr Asn Gly Ser Leu Ser Leu Gly Val Cys Gly Pro Gln Gly 70 75 Arg Leu Ser Trp Gln Ala Pro Ser His Leu Thr Leu Gln Leu Asp Pro 90 Val Ser Leu Asn His Ser Gly Ala Tyr Val Cys Trp Ala Ala Val Glu 105

 Ile
 Pro
 Glu
 Leu
 Glu
 Glu
 Ala
 Glu
 Gly
 Asn
 Ile
 Thr
 Arg
 Leu
 Phe
 Val

 115
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<210> 1818 <211> 115 <212> PRT <213> Homo sapiens

<400> 1818 Met Gln Ala Asp Arg Gly Gly Val Leu Phe Leu Val Ala Leu Pro Gly 10 Leu Trp Glu Thr Val Leu Arg His Pro Gly Ala Ser Pro Glu Pro Val 20 25 Ser Leu His Thr Gly Leu Ala Ala Glu Pro Leu Leu Gly Trp Arg Ala 35 40 45 Glu Val Ala Thr Ala Ala Gly Leu Gln Asp Arg Arg Ile Gly Arg Arg 50 55 60 Ser Leu Pro Ala Thr Leu Pro Pro Pro Phe Pro Gln Ala Gly Asp Leu 70 75 Arg Glu Ser Ile Leu Leu Leu Pro Cys Arg Glu Ser Arg Ser Thr Ser 90 85 Trp Leu Ser Pro Tyr Trp Val Pro Glu Ile Pro Gly Thr Leu His Asp 105 Arg Gly Arg 115

<210> 1819 <211> 70 <212> PRT <213> Homo sapiens

<210> 1820 <211> 635 <212> PRT <213> Homo sapiens

<400> 1820 Met Leu Arg Ser Leu Leu Val Tyr Met Leu Phe Leu Leu Val Thr Leu 10 Leu Ala Ser Tyr Gly Asp Ala Ser Cys His Gly His Ala Tyr Arg Leu 25 Gln Ser Ala Ile Lys Gln Glu Leu His Ser Arg Ala Phe Leu Ala Ile 40 Thr Arg Ser Glu Glu Leu Trp Pro Trp Met Ala His Val Leu Leu Pro 55 60 Tyr Val His Gly Asn Gln Ser Ser Pro Glu Leu Gly Pro Pro Arg Leu 70 75 Arg Gln Val Arg Leu Gln Glu Ala Leu Tyr Pro Asp Pro Pro Gly Pro 90 Arg Val His Thr Cys Ser Ala Ala Gly Gly Phe Ser Thr Ser Asp Tyr 105 Asp Val Gly Trp Glu Ser Pro His Asn Gly Ser Gly Thr Trp Ala Tyr 115 120 Ser Ala Pro Asp Leu Leu Gly Ala Trp Ser Trp Gly Ser Cys Ala Val 135 140 Tyr Asp Ser Gly Gly Tyr Val Gln Glu Leu Gly Leu Ser Leu Glu Glu 150 155 Ser Arg Asp Arg Leu Arg Phe Leu Gln Leu His Asn Trp Leu Asp Asn 165 170 Arg Ser Arg Ala Val Phe Leu Glu Leu Thr Arg Tyr Ser Pro Ala Val 185 Gly Leu His Ala Ala Val Thr Leu Arg Leu Glu Phe Pro Ala Ala Gly 200 205 195 Arg Ala Leu Ala Ala Leu Ser Val Arg Pro Phe Ala Leu Arg Arg Leu 215 Ser Ala Gly Leu Ser Leu Pro Leu Leu Thr Ser Val Cys Leu Leu Leu . 230 235 Phe Ala Val His Phe Ala Val Ala Glu Ala Arg Thr Trp His Arg Glu 245 250 Gly Arg Trp Arg Val Leu Arg Leu Gly Ala Trp Ala Arg Trp Leu Leu 265 260 Val Ala Leu Thr Ala Ala Thr Ala Leu Val Arg Leu Ala Gln Leu Gly 280 Ala Ala Asp Arg Gln Trp Thr Arg Phe Val Arg Gly Arg Pro Arg Arg 295 300 Phe Thr Ser Phe Asp Gln Val Ala His Val Ser Ser Ala Ala Arg Gly 315 310 Leu Ala Ala Ser Leu Leu Phe Leu Leu Val Lys Ala Ala Gln His 325 330 Val Arg Phe Val Arg Gln Trp Ser Val Phe Gly Lys Thr Leu Cys Arg 345 Ala Leu Pro Glu Leu Leu Gly Val Thr Leu Gly Leu Val Val Leu Gly 360 Val Ala Tyr Ala Gln Leu Ala Ile Leu Leu Val Ser Ser Cys Val Asp 375 380 Ser Leu Trp Ser Val Ala Gln Ala Leu Leu Val Leu Cys Pro Gly Thr 390 395 Gly Leu Ser Thr Leu Cys Pro Ala Glu Ser Trp His Leu Ser Pro Leu 405 410 Leu Cys Val Gly Leu Trp Ala Leu Arg Leu Trp Gly Ala Leu Arg Leu 425 Gly Ala Val Ile Leu Arg Trp Arg Tyr His Ala Leu Arg Gly Glu Leu 440

Tyr Arg Pro Ala Trp Glu Pro Gln Asp Tyr Glu Met Val Glu Leu Phe 455 Leu Arg Arg Leu Arg Leu Trp Met Gly Leu Ser Lys Val Lys Glu Phe 475 470 Arg His Lys Val Arg Phe Glu Gly Met Glu Pro Leu Pro Ser Arg Ser 485 490 495 Ser Arg Gly Ser Lys Val Ser Pro Asp Val Pro Pro Pro Ser Ala Gly 505 510 Ser Asp Ala Ser His Pro Ser Thr Ser Ser Ser Gln Leu Asp Gly Leu 520 Ser Val Ser Leu Gly Arg Leu Gly Thr Arg Cys Glu Pro Glu Pro Ser 535 540 Arg Leu Gln Ala Val Phe Glu Ala Leu Leu Thr Gln Phe Asp Arg Leu 550 555 Asn Gln Ala Thr Glu Asp Val Tyr Gln Leu Glu Gln Gln Leu His Ser 565 570 Leu Gln Gly Arg Arg Ser Ser Arg Ala Pro Ala Gly Ser Ser Arg Gly 580 585 Pro Ser Pro Gly Leu Arg Pro Ala Leu Pro Ser Arg Leu Ala Arg Ala 600 605 Ser Arg Gly Val Asp Leu Ala Thr Gly Pro Ser Arg Thr Pro Leu Arg 615 620 · Ala Lys Asn Lys Val His Pro Ser Ser Thr * 630

<210> 1821 <211> 84 <212> PRT

<213> Homo sapiens

<210> 1822 <211> 108 <212> PRT <213> Homo sapiens

20 25 Gly Ser Ala Leu Phe Pro Ser Ala Ala Ala Val Gly Lys Gln Gly Ser 40 35 Met Gly Val Thr Ser His Met Gln Cys Pro Val Cys Gln His Pro Arg 55 60 Asp Val Leu Leu Ala Ser Pro Val Ser His Ser His Ala Cys Gln Pro 70 75 Gln Pro Ala Gly Cys Ser Asn Cys His Leu Gly His Leu Thr Arg Ser 85 90 Pro Pro Phe Gln Gly Leu Leu Pro Leu Leu Gln * 105 107

<210> 1823 <211> 74 <212> PRT <213> Homo sapiens

Ser Trp His Pro Trp Leu Ala Ser Thr * 65 70 73

<210> 1824 <211> 58 <212> PRT <213> Homo sapiens

<210> 1825 <211> 225 <212> PRT <213> Homo sapiens

<400> 1825

Met Ala Cys Lys Gly Leu Leu Gln Gln Val Gln Gly Pro Arg Leu Pro 10 Trp Thr Arg Leu Leu Leu Leu Leu Val Phe Ala Val Gly Phe Leu 25 Cys His Asp Leu Arg Ser His Ser Ser Phe Gln Ala Ser Leu Thr Gly Arg Leu Leu Arg Ser Ser Gly Phe Leu Pro Ala Ser Gln Gln Ala Cys 55 Ala Lys Leu Tyr Ser Tyr Ser Leu Gln Gly Tyr Ser Trp Leu Gly Glu 70 Thr Leu Pro Leu Trp Gly Ser His Leu Leu Thr Val Val Arg Pro Ser 90 Leu Gln Leu Ala Trp Ala His Thr Asn Ala Thr Val Ser Phe Leu Ser 105 Ala His Cys Ala Ser His Leu Ala Trp Phe Gly Asp Ser Leu Thr Ser 115 120 125 Leu Ser Gln Arg Leu Gln Ile Gln Leu Pro Asp Ser Val Asn Gln Leu 135 140 Leu Arg Tyr Leu Arg Glu Leu Pro Leu Leu Phe His Gln Asn Val Leu 150 155 Leu Pro Leu Trp His Leu Leu Glu Ala Leu Ala Trp Ala Gln Glu 165 170 . 175 His Cys His Glu Ala Cys Arg Gly Glu Val Thr Trp Asp Cys Met Lys 185 190 Thr Gln Leu Ser Glu Ala Val His Trp Thr Trp Leu Cys Leu Gln Asp 200 205 Ile Thr Val Ala Phe Leu Asp Trp Ala Leu Ala Leu Ile Ser Gln Gln 215

<210> 1826 <211> 119 <212> PRT <213> Homo sapiens

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<400> 1826 Met Tyr Arg Glu Val Cys Ser Ile Arg Phe Leu Phe Thr Ala Val Ser 10 Leu Leu Ser Leu Phe Leu Ser Ala Phe Trp Leu Gly Leu Leu Tyr Leu 20 25 Val Ser Pro Leu Glu Asn Glu Pro Lys Glu Met Leu Thr Leu Ser Glu 3.5 40 Tyr His Glu Arg Ala Arg Ser Gln Gly Gln Gln Leu Leu Gln Phe Gln 55 60 Ala Glu Leu Asp Lys Leu His Lys Glu Ala Ser Leu Val Cys Gly Cys 75 Pro Ser Leu Arg Glu Val Pro Ser Ser Ala Val Ser Arg Leu Glu Pro 85 90 Pro Ser Ile Ala Gln Pro Leu Leu Ser Arg Leu Gln Leu Tyr Leu Ser 100 105 Asp Pro Ser Ser Tyr Leu Val 115 119

<210> 1827 <211> 58 <212> PRT <213> Homo sapiens

<400> 1827

Met Lys Leu Met Arg Pro Leu Met Leu Leu Tyr Ile Ser Gln Leu Tyr 10 Met Leu Met Lys Arg Asn Ser Pro His Ile Gly Asp Cys Leu Ser Leu 20 25 Leu Phe Leu Gln Glu Lys Lys Gln Lys Glu Val Tyr Thr Leu Leu Ala 35 🗼 40 Met Met Gln Val Ser Phe Ile Leu Val 55 57

<210> 1828 <211> 102 <212> PRT <213> Homo sapiens

<400> 1828

Met Gln Pro Ser Gly Leu Glu Gly Pro Gly Thr Phe Gly Arg Trp Pro 10 Leu Leu Ser Leu Leu Leu Leu Leu Leu Leu Gln Pro Val Thr Cys 25 Ala Tyr Thr Thr Pro Gly Pro Pro Arg Ala Leu Thr Thr Leu Gly Ala 35 40 Pro Arg Ala His Thr Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu 55 60 Ser Ser Pro Ser Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met 70 Arg Asp Phe Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu 85 90 Arg Gln Val Tyr His Asn 100

<210> 1829 <211> 88 <212> PRT <213> Homo sapiens

<400> 1829

Met Arg Lys Ile Tyr Thr Thr Val Leu Phe Ala Asn Ile Tyr Leu Ala 5 10 Pro Leu Ser Leu Ile Val Ile Met Tyr Gly Arg Ile Gly Ile Ser Leu 25 Phe Arg Ala Ala Val Pro His Thr Gly Arg Lys Asn Gln Glu Gln Trp 35 40 His Val Val Ser Arg Lys Lys Gln Lys Ile Ile Lys Met Leu Leu Ile 55 Val Ala Leu Leu Phe Ile Leu Ser Trp Leu Pro Leu Trp Thr Leu Met

Met Leu Ser Asp Tyr Ala Lys Pro 85 88

<210> 1830

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1830

Met Lys Trp Arg Arg Lys Ser Ala Tyr Trp Lys Ala Leu Lys Val Phe 1 5 10 15 Lys Leu Pro Val Glu Phe Leu Leu Leu Thr Val Pro Val Val Asp 25 Pro Asp Lys Asp Asp Gln Asn Trp Lys Arg Pro Leu Asn Cys Leu His 40 45 Leu Val Ile Ser Pro Leu Val Val Leu Thr Leu Gln Ser Gly Thr 55 Tyr Gly Val Tyr Glu Ile Gly Gly Leu Val Pro Val Trp Val Val Val 65 70 75 Val Ile Ala Gly Thr Ala Leu Ala Ser Val Thr Phe Phe Ala Thr Ser 85 90 95 Asp Ser Gln Pro Pro Arg Leu His Trp Leu Phe Ala Phe Leu Gly Phe 100 105 Leu Thr Ser Ala Leu Trp Ile Asn

<210> 1831

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1831

<210> 1832

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1832

Met Gly Ile Lys His Phe Ser Gly Leu Phe Val Leu Leu Cys Ile Gly

1 5 10 15
Phe Gly Leu Ser Ile Leu Thr Thr Ile Gly Glu His Ile Val Tyr Arg

<210> 1833 <211> 60 <212> PRT <213> Homo sapiens

<210> 1834 <211> 62 <212> PRT <213> Homo sapiens

<210> 1835 <211> 71 <212> PRT <213> Homo sapiens

Ser Pro Leu Trp Glu Val Val Phe Cys His Thr Pro Cys Phe Arg Ala
35 40 45

Gln Pro Gln Leu Asp Arg Ala Gly Ser Ser Phe Leu Ile Tyr Pro Ser
50 55 60

Pro His Ser Thr Ser Asn *

<210> 1836 <211> 110 <212> PRT <213> Homo sapiens

<400> 1836 Met Leu Met Tyr Met Phe Tyr Val Leu Pro Phe Cys Gly Leu Ala Ala 1 5 10. 15 Tyr Ala Leu Thr Phe Pro Gly Cys Ser Trp Leu Pro Asp Trp Ala Leu 25 Val Phe Ala Gly Gly Ile Gly Gln Ala Gln Phe Ser His Met Gly Ala 35 40 Ser Met His Leu Arg Thr Pro Phe Thr Tyr Arg Val Pro Glu Asp Thr 55 60 Trp Gly Cys Phe Phe Val Cys Asn Leu Leu Tyr Ala Leu Gly Pro His 70 75 Leu Leu Ala Tyr Arg Cys Leu Gln Trp Pro Ala Phe Phe His Gln Pro 90 Pro Pro Ser Asp Pro Leu Ala Leu His Lys Lys Gln His * 105 109

<210> 1837 <211> 91 <212> PRT <213> Homo sapiens

<400> 1837 Met Leu Leu Leu Thr Trp Pro Tyr Ile Leu Leu Gly Phe Leu Phe 10 Cys Ala Phe Val Val Val Asn Gly Gly Ile Val Ile Gly Asp Arg Ser 25 Ser His Glu Ala Cys Leu His Phe Pro Gln Leu Phe Tyr Phe Phe Ser 35 40 Phe Thr Leu Phe Phe Ser Phe Pro His Leu Leu Ser Pro Ser Lys Ile 50 55 60 Lys Thr Phe Leu Ser Leu Val Trp Lys Arg Arg Ile Leu Phe Phe Val 70 75 Val Thr Leu Val Ser Val Phe Leu Val Trp Asn 90 91

<210> 1838 <211> 201 <212> PRT <213> Homo sapiens

<400> 1838 Met Pro Ile Gly Leu Arg Gly Leu Met Ile Ala Val Met Leu Ala Ala 10 Leu Met Ser Ser Leu Thr Ser Ile Phe Asn Ser Ser Ser Thr Leu Phe 20 25 Thr Met Asp Ile Trp Arg Arg Leu Arg Pro Arg Ser Gly Glu Arg Glu 40 Leu Leu Val Gly Arg Leu Val Ile Val Ala Leu Ile Gly Val Ser 55 Val Ala Trp Ile Pro Val Leu Gln Asp Ser Asn Ser Gly Gln Leu Phe 70 75 Ile Tyr Met Gln Ser Val Thr Ser Ser Leu Ala Pro Pro Val Thr Ala 85 90 Val Phe Val Leu Gly Val Phe Trp Arg Arg Ala Asn Glu Gln Gly Ala 100 105 Phe Trp Gly Leu Ile Ala Gly Leu Val Val Gly Ala Thr Arg Leu Val 115 120 125 Leu Glu Phe Leu Asn Pro Ala Pro Pro Cys Gly Glu Pro Asp Thr Arg 135 140 Pro Ala Val Leu Gly Ser Ile His Tyr Leu His Phe Ala Val Ala Leu 150 155 Phe Ala Leu Ser Gly Ala Val Val Ala Gly Ser Leu Leu Thr Pro 165 170 Pro Pro Gln Ser Val Gln Ile Glu Asn Leu Thr Trp Trp Thr Leu Ala 185 Gln Asp Val Pro Leu Gly Thr Lys Ala 195 200 201

<210> 1839

<211> 130

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(130)

<223> Xaa = any amino acid or nothing

<400> 1839

Met Leu Phe Phe Leu Gln Ser Leu Phe Met Leu Ala Thr Val Val Leu 10 5 Tyr Phe Ser His Leu Lys Glu Tyr Val Ala Ser Met Val Phe Ser Leu 25 Ala Leu Gly Trp Thr Asn Met Leu Tyr Tyr Thr Arg Gly Phe Gln Gln 35 40 Met Gly Ile Tyr Ala Val Met Ile Glu Lys Met Ile Leu Arg Asp Leu Cys Arg Phe Met Phe Val Tyr Ile Val Phe Leu Phe Gly Phe Ser Thr 70 75 ' Ala Val Val Thr Leu Ile Glu Asp Gly Lys Asn Asp Ser Leu Pro Ser 85 90 Glu Ser Thr Ser His Arg Trp Arg Gly Phe Ser Xaa Thr Pro Leu Xaa 110 105 Leu Leu His Lys Leu Tyr Ser Thr Cys Leu Glu Leu Ser Asn Ser Thr 120

Xaa Asp 130

> <210> 1840 <211> 47 <212> PRT <213> Homo sapiens

<400> 1840

Met Asn Arg Val Met Arg Gly Leu Ala Ile Thr Thr Thr Cys Leu Leu 1 5 5 10 10 15 15 Ser Met Leu Gln Ala Ile Thr Ile Ser Pro Ser Ile Leu Trp Asn His 20 25 5 30 30 Ala Ala Val Gln Tyr Val His Gly His Ser Leu Val Gln Ala * 35 46

<210> 1841 <211> 82 <212> PRT <213> Homo sapiens

<400> 1841

Met Thr Ala Arg Leu Met Arg Ser Leu Leu Ala Ala Gln Leu Thr Phe 5 10 Val Tyr Arg Val Ala His Leu Met Asn Val Ala Gln Arg Ile Arg Gly 20 25 Asn Arg Pro Ile Lys Asn Glu Arg Leu Leu Ala Leu Leu Gly Asp Asn 35 40 Glu Lys Met Asn Leu Ser Asp Val Glu Leu Ile Pro Leu Pro Leu Glu 55 60 Pro Gln Val Lys Ile Arg Gly Ile Ile Pro Glu Thr Ala Thr Leu Phe 65 70 Lys Ser 82

<210> 1842 <211> 77 <212> PRT <213> Homo sapiens

<400> 1842

65 70 75

<210> 1843 <211> 109 <212> PRT <213> Homo sapiens

<400> 1843 Met Met His Asn Ile Ile Val Lys Glu Leu Ile Val Thr Phe Phe Leu 10 Gly Ile Thr Val Val Gln Met Leu Ile Ser Val Thr Gly Leu Lys Gly 20 25 Val Glu Ala Gln Asn Gly Ser Glu Ser Glu Val Phe Val Gly Lys Tyr 35 . 40 Glu Thr Leu Val Phe Tyr Trp Pro Ser Leu Leu Cys Leu Ala Phe Leu 55 60 Leu Gly Arg Phe Leu His Met Phe Val Lys Ala Leu Arg Val His Leu Gly Trp Glu Leu Gln Val Glu Glu Lys Ser Val Leu Glu Val His Gln 85 90 Gly Glu His Val Lys Gln Leu Leu Arg Ile Pro Arg Pro 100

105

109

<210> 1844 <211> 85 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(85) <223> Xaa = any amino acid or nothing

<400> 1844 Met Thr Ile His Leu Cys Ser Asn Leu Met Cys His Phe Leu Gln Arg 10 Met Gly Thr Ile Leu Leu Cys Pro Asn Met Gln Pro His Gln Asn Leu 25 Thr Thr Val Ile Cys Ser Lys Gly Asn Leu Leu Arg Ala Val Lys Gly Ser Lys Ser Leu Arg Asn Ala Arg Lys Tyr Pro Phe His His Pro Pro 55 60 Xaa Xaa Glu Pro Pro Asn Gly Gly Gln Thr Arg Xaa Gly Gly Ala Arg Phe Lys Gln Pro Thr

<210> 1845 <211> 110 <212> PRT <213> Homo sapiens

<210> 1846 <211> 94 <212> PRT <213> Homo sapiens

<210> 1847 <211> 1300 <212> PRT <213> Homo sapiens

| | | | | 85 | | | | | 90 |) | | | | 95 | ; |
|------------|------------|------------|------------|------------|------------|-------------|------------|-----|------------|------------|------------|------------|-----|------------|------------|
| Cys | Pro | Asp | Tyr
100 | | Ser | Phe | Cys | Ala | Glu | | His | Asn | Pro | Thr | Ser |
| Pro | Pro | Ser
115 | Ser | Lys | Lys | Ala | Pro
120 | | Pro | Ser | Gly | Ala
125 | | Gln | Thr |
| Ile | Lys
130 | | Thr | Thr | Lys | Arg
135 | | Pro | Lys | Pro | Pro
140 | | Lys | Lys | rys |
| Thr
145 | Lys | Lys | Val | Ile | Glu
150 | Ser | Glu | Glu | Ile | Thr
155 | | Glu | His | Ser | Val
160 |
| Ser | Glu | Asn | Gln | Glu
165 | | Ser | Ser | Ser | Ser
170 | | Ser | Ser | Ser | Ser
175 | Ser |
| | | | 180 | | | | | 185 | | | | | 190 | | Arg |
| | | 195 | | | | | 200 | | | | | 205 | | | Thr |
| | 210 | | | | | 215 | | | | | 220 | | | - | Ser |
| 225 | | | | | 230 | | | | | 235 | | _ | | | Thr
240 |
| | | | | Lys
245 | | | | | 250 | | | | | 255 | _ |
| | | | 260 | Arg | | | | 265 | | | | - | 270 | | • |
| | | 275 | | | | | 280 | | | | | 285 | | | Glu |
| | 290 | • | | Asn | | 295 | | | | | 300 | | | | |
| 305 | | | | Glu | 310 | | | | | 315 | | | | | 320 |
| | | | | Ser
325 | | | | | 330 | | | | _ | 335 | |
| | | | 340 | Gly | | | | 345 | | | | | 350 | | |
| | | 355 | | Glu | | | 360 | | | | | 365 | | | |
| | 370 | | | Ser | | 375 | | | | | 380 | | | | |
| 385 | | | | Ala | 390 | | | | _ | 395 | | | | | 400 |
| _ | | | | Ala
405 | | | | | 410 | | | | | 415 | |
| | | | 420 | Ala | | | | 425 | - | | | | 430 | | |
| | | 435 | | Pro
Pro | | | 440 | | | | | 445 | | | |
| | 450 | | | Pro | | 455 | | | | | 460 | | | | |
| 465 | | | | | 470 | | | | | 475 | | | | | 480 |
| | | | | Thr
485 | | | | | 490 | | | • | | 495 | |
| Glu | | | 500 | | | | | 505 | , | | | | 510 | | |
| Glu | | 515 | | | | | 520 | | | | | 525 | | | - |
| | 530 | | | Thr | | 535 | | | | | 540 | | | _ | |
| Ala
545 | | | **** | | 550 | 31 K | FIO | 96T | ST.O | 555 | THE | THE | пÃв | GIU | 560 |

| Ala | Pro | Thr | Thr | Pro
565 | - | Glu | Pro | Ala | Pro | | Thr | Pro | Lys | Lys
575 | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ala | Pro | Thr | Thr
580 | Pro | | Glu | Pro | Ala
585 | | Thr | Thr | Pro | Lys
590 | | Pro |
| Ala | Pro | Thr
595 | Thr | Thr | Lys | Lys | Pro
600 | | Pro | Thr | Ala | Prc
605 | _ | Glu | Pro |
| Ala | Pro
610 | Thr | Thr | Pro | Lys | Glu
615 | | Ala | Pro | Thr | Thr
620 | | Lys | Lys | Leu |
| Thr
625 | Pro | Thr | Thr | Pro | Glu
630 | _ | Leu | Ala | Pro | Thr
635 | | Pro | Glu | . Lys | Pro
640 |
| Ala | Pro | Thr | Thr | Pro
645 | Glu | Glu | Leu | Ala | Pro
650 | | Thr | Pro | Glu | Glu
655 | |
| Thr | Pro | Thr | Thr
660 | Pro | Glu | Glu | Pro | Ala
665 | | Thr | Thr | Pro | Lys
670 | | Ala |
| Ala | Pro | Asn
675 | Thr | Pro | Lys | Glu | Pro
680 | | Pro | Thr | Thr | Pro
685 | _ | Glu | Pro |
| Ala | Pro
690 | Thr | Thr | Pro | Lys | Glu
695 | | Ala | Pro | Thr | Thr
700 | | Lys | Glu | Thr |
| Ala
705 | Pro | Thr | Thr | Pro | Ьуs
710 | Gly | Thr | Ala | Pro | Thr
715 | | Leu | Lys | Glu | Pro
720 |
| | | | • | Pro
725 | _ | | • | | 730 | - | | | | 735 | |
| | | _ | 740 | Pro | | | | 745 | | | _ | | 750 | | |
| | | 755 | _ | Thr | | | 760 | | | _ | | 765 | | | |
| | 770 | - | | Pro | | 775 | | | | _ | 780 | | | | |
| 785 | | | | Pro | 790 | | | | | 795 | - | | | | 800 |
| | | | | Thr
805 | | | | - | 810 | | | | | 815 | _ |
| | | | 820 | Thr | | | | 825 | | | | | 830 | | |
| | | 835 | | Thr | | | 840 | - | | | | 845 | | | |
| | 850 | | | Thr | | 855 | | | | | 860 | | | • | - |
| 865 | | | | Ile | 870 | _ | | | | 875 | | | | | 880 |
| | | | | Thr
885 | | _ | | | 890 | | | | _ | 895 | |
| | | | 900 | Thr | | | | 905 | | | | | 910 | | |
| | | 915 | _ | Asp | _ | | 920 | | _ | _ | | 925 | | | |
| | 930 | | | Ala | • | 935 | | | | | 940 | | | | |
| 945 | | | | Thr | 950 | | - | | | 955 | | | | | 960 |
| | | | | Thr
965 | | | | | 970 | | _ | | | 975 | |
| - | | | 980 | Leu | | | _ | 985 | | | | - | 990 | | |
| | | 995 | | Ile | |] | 1000 | • | | | 1 | 1005 | | | |
| . 1 | 010 | | | Asn | 1 | 1015 | | | | J | 1020 | | | _ | |
| Thr | ŗÀs | Ala | Pro | Lys | гÀа | Pro | Thr | Ser | Thr | Lys | ГЛВ | Pro | Lys | Thr | Met |

1030 1035 Pro Arg Val Arg Lys Pro Lys Thr Thr Pro Thr Pro Arg Lys Met Thr 1045 1050 Ser Thr Met Pro Glu Leu Asn Pro Thr Ser Arg Ile Ala Glu Ala Met 1060 1065 1070 Leu Gln Thr Thr Thr Arg Pro Asn Gln Thr Pro Asn Ser Lys Leu Val 1075 1080 1085 Glu Val Asn Pro Lys Ser Glu Asp Ala Gly Gly Ala Glu Gly Glu Thr 1090 1095 1100 Pro His Met Leu Leu Arg Pro His Val Phe Met Pro Glu Val Thr Pro 1105 1110 1115 Asp Met Asp Tyr Leu Pro Arg Val Pro Asn Gln Gly Ile Ile Ile Asn 1125 1130 Pro Met Leu Ser Asp Glu Thr Asn Ile Cys Asn Gly Lys Pro Val Asp 1140 1145 1150 Gly Leu Thr Thr Leu Arg Asn Gly Thr Leu Val Ala Phe Arg Gly His 1165 1155 1160 Tyr Phe Trp Met Leu Ser Pro Phe Ser Pro Pro Ser Pro Ala Arg Arg 1170 1175 1180 Ile Thr Glu Val Trp Gly Ile Pro Ser Pro Ile Asp Thr Val Phe Thr 1190 1195 Arg Cys Asn Cys Glu Gly Lys Thr Phe Phe Phe Lys Asp Ser Gln Tyr 1205 1210 1215 Trp Arg Phe Thr Asn Asp Ile Lys Asp Ala Gly Tyr Pro Lys Pro Ile 1220 1225 1230 Phe Lys Gly Phe Gly Gly Leu Thr Gly Gln Ile Val Ala Ala Leu Ser 1235 1240 1245 Thr Ala Lys Tyr Lys Asn Trp Pro Glu Ser Val Tyr Phe Phe Lys Arg 1250 1255 1260 Gly Gly Ser Ile Gln Gln Tyr Ile Tyr Lys Gln Glu Pro Val Gln Lys 1270 1275 Cys Pro Gly Arg Arg Pro Ala Leu Asn Tyr Pro Val Tyr Gly Glu Thr 1285 1290 Asp Thr Gly * 1299

<210> 1848 <211> 103 <212> PRT <213> Homo sapiens

<400> 1848

Met Asn Pro Ala Val Arg Gln Arg Cys Leu Leu Phe Cys Phe Gln Gln 10 1 5 Lys Leu Ile Leu Ser His Phe Phe Leu Leu Gln Val Pro Gln Trp Cys 20 25 Ala Glu Tyr Cys Leu Ser Ile His Tyr Gln His Gly Gly Val Ile Cys 35 40 Thr Gln Val His Lys Gln Thr Val Val Gln Leu Ala Leu Arg Val Ala 55 Asp Glu Met Asp Val Asn Ile Gly His Glu Val Gly Tyr Val Ile Pro 70 75 Phe Glu Asn Cys Cys Thr Asn Glu Thr Ile Leu Arg Leu Val Cys Gly 85 90 Val Gln Ser Ala Pro Cys * 100 102

<210> 1849 <211> 50 <212> PRT <213> Homo sapiens

<210> 1850 <211> 84 <212> PRT <213> Homo sapiens

<210> 1851 <211> 51 <212> PRT <213> Homo sapiens

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<210> 1852
<211> 54
<212> PRT
<213> Homo sapiens
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<210> 1853 <211> 129 <212> PRT <213> Homo sapiens

· <400> 1853 Met Ala Val Val Arg Val Met Val Val Val Arg Val Thr Ala Val Val 10 Arg Val Met Val Val Val Arg Val Val Val Arg Val Met Val Val 20 25 Val Arg Ile Thr Ala Val Leu Arg Val Met Val Val Val Arg Ile Met 40 Ala Val Ile Arg Val Met Val Val Val Arg Val Thr Ala Ile Val Gly 55 Val Met Val Val Ile Arg Val Thr Ala Ile Val Ser Ile Met Val Val 70 Val Arg Val Met Val Val Val Arg Val Met Val Val Ala Arg Pro Met 90 Val Val Val Arg Val Met Ala Val Val Arg Val Met Ala Asp Ser Ala 105 Leu Arg Ala Ile Cys Ser Ser Ser Leu Asn Val Thr Phe Ser Leu Glu 120

<210> 1854
<211> 190
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(190)
<223> Xaa = any amino acid or nothing

<400> 1854

Met Ser Cys Phe Gly Leu Leu Gly Gly Leu Thr Pro Arg Val Leu 10 Ser Thr Glu Glu Gln Leu Pro Pro Gly Phe Pro Ser Ile Asp Met Gly Pro Gln Leu Lys Val Val Glu Lys Ala Arg Thr Ala Thr Met Leu Cys Ala Ala Gly Gly Asn Pro Asp Pro Glu Ile Ser Trp Phe Lys Asp Phe 55 Leu Pro Val Asp Pro Ala Thr Ser Asn Gly Arg Ile Lys Gln Leu Arg Ser Gly Glu Gln Arg Ala Gly Val Lys Gly Pro Cys Arg Pro Gln Asn Lys Arg Leu Val Arg Ser Gln His Ser Leu Leu Pro Trp Ala Trp Ala . 100 105 Pro Pro Gly Leu Ser Gly Gly Tyr Leu Val Gly Trp Ala Gly Ser Tyr 125 120 Cys Arg Cys Ala Trp Leu Arg Glu Glu Ser Ser Trp Leu Ala Val Pro 140 135 Leu Pro Ser Ser Asp Cys Gln Thr Pro Asp Phe Gly Pro Val Leu Pro 150 155 Leu Pro Ala His Val Met Cys Gln Cys Gly Gly Leu Phe Lys Gly Ala 170 Leu Trp Met Leu Thr Leu Leu Leu Pro Cys Xaa Leu Ala * 180 185

<210> 1855 <211> 78 <212> PRT <213> Homo sapiens

<210> 1856 <211> 67 <212> PRT <213> Homo sapiens

35 40 45

Thr Leu Met Gly Ser Glu Met Pro Met Ala Leu Ala Ala Glu Thr Trp
50 55 60

Leu Leu *
65 66

<210> 1857 <211> 107 <212> PRT <213> Homo sapiens

<400> 1857 Met Leu Leu Met Phe Leu Leu Ala Thr Cys Leu Leu Ala Ile Ile Phe 5 10 Val Pro Gln Glu Met Gln Thr Leu Arg Val Val Leu Ala Thr Leu Gly 25 Val Gly Ala Ala Ser Leu Gly Ile Thr Cys Ser Thr Ala Gln Glu Asn 40 Glu Leu Ile Pro Ser Ile Ile Arg Gly Arg Ala Thr Gly Ile Thr Gly 55 Asn Phe Ala Asn Ile Gly Gly Ala Leu Ala Ser Leu Val Met Ile Leu 70 75 Ser Ile Tyr Ser Arg Pro Leu Pro Trp Ile Ile Tyr Gly Val Phe Ala . 85 Ile Leu Ser Gly Leu Val Val Leu Leu Pro

105

<210> 1858 <211> 134 <212> PRT <213> Homo sapiens

100

<400> 1858 Met Ile Pro Pro Ala Ile Phe Trp Val Leu Ile Ile Phe Gly Trp Thr 10 Leu Val Tyr Gly Phe Val Tyr Phe Thr Thr Gly Glu Thr Ile Met Asp 25 Lys Leu Leu Arg Val Leu Tyr Trp Ile Leu Val Lys Thr Phe Phe Arg 40 Glu Ile Ser Val Ser His Gln Glu Arg Ile Pro Lys Asp Lys Pro Val 55 Met Leu Val Cys Ala Pro His Ala Asn Gln Phe Val Asp Gly Met Val 75 Ile Ser Thr His Leu Asp Arg Lys Val Tyr Phe Val Gly Ala Ala Ser 90 Ser Phe Arg Lys Tyr Lys Val Val Gly Leu Phe Met Lys Leu Met Ala 105 Ser Ile Ile Ser Gly Glu Arg His Gln Asp Val Lys Lys Val Leu Thr 120 125 Gly Met Ala Thr Glu Lys 130

<210> 1859 <211> 82 <212> PRT <213> Homo sapiens

<210> 1860 <211> 46 <212> PRT <213> Homo sapiens

<210> 1861 <211> 128 <212> PRT <213> Homo sapiens

<400> 1861 Met Thr Ile Phe Phe Ser Leu Leu Val Leu Ala Ile Cys Ile Ile Leu · 5 10 Val His Leu Leu Ile Arg Tyr Arg Leu His Phe Leu Pro Glu Ser Val 25 Ala Val Val Ser Leu Gly Ile Leu Met Gly Ala Val Ile Lys Ile Ile 40 Glu Phe Lys Lys Leu Ala Asn Trp Lys Glu Glu Glu Met Phe Arg Pro 55 Asn Met Phe Phe Leu Leu Leu Pro Pro Ile Ile Phe Glu Ser Gly 70 75 80 Tyr Ser Leu His Lys Gly Asn Phe Phe Gln Asn Ile Gly Ser Ile Thr 90 Leu Phe Ala Val Phe Gly Thr Ala Ile Ser Ala Phe Val Val Gly Gly

Gly Ile Tyr Phe Leu Gly Gln Ala His Val Ile Ser Lys Leu Asn Met 115 120 125 128

<210> 1862 <211> 58 <212> PRT <213> Homo sapiens

<210> 1863 <211> 50 <212> PRT <213> Homo sapiens

<210> 1864 <211> 90 <212> PRT <213> Homo sapiens

Gly Val Glu Leu Leu Val Cys Ser Pro Leu Glu Ala Leu Gly Pro Leu 65 70 70 75 80

Leu Cys Leu Gly Glu Leu Gly Leu Gln Ala 85 90

<210> 1865 <211> 125 <212> PRT <213> Homo sapiens

<400> 1865 Met Arg Leu Gly Leu Leu Leu Leu Ala Arg His Trp Cys Ile Ala Gly 1 5 10 Val Phe Pro Gln Lys Phe Asp Gly Asp Ser Ala Tyr Val Gly Met Ser 20 25 Asp Gly Asn Pro Glu Leu Leu Ser Thr Ser Gln Thr Tyr Asn Gly Gln 40 45 Ser Glu Asn Asn Glu Asp Tyr Glu Ile Pro Pro Ile Thr Pro Pro Asn 55 60 Leu Pro Glu Pro Ser Leu Leu His Leu Gly Asp His Glu Ala Ser Tyr 70 75 His Ser Leu Cys His Gly Leu Thr Pro Asn Gly Leu Leu Pro Ala Tyr 85 90 Ser Tyr Gln Ala Met Asp Leu Pro Ala Ile Met Val Ser Asn Met Leu 105 Ala Gln Asp Ser His Leu Leu Ser Gly Gln Leu Pro Thr 115 120

<210> 1866 <211> 129 <212> PRT <213> Homo sapiens

<400> 1866 Met Cys Phe Leu Asn Lys Leu Leu Leu Ala Ala Leu Asp Trp Leu 10 Phe Gln Ile Pro Thr Val Pro Glu Asp Leu Phe Phe Leu Glu Glu Gly 20 25 Pro Ser Tyr Ala Phe Glu Val Asp Thr Val Ala Pro Glu His Gly Leu 35 40 Asp Asn Ala Pro Val Val Asp Gln Gln Leu Leu Tyr Thr Cys Cys Pro 55 60 Tyr Ile Gly Glu Leu Arg Lys Leu Leu Ala Ser Trp Val Ser Gly Ser 70 75 Ser Gly Arg Ser Gly Gly Phe Met Arg Lys Ile Thr Pro Thr Thr 90 Thr Ser Leu Gly Ala Gln Pro Ser Gln Thr Ser Gln Gly Leu Gln Ala 100 105 110 Gln Leu Ala Gln Ala Phe Phe His Asn Gln Pro Pro Ser Leu Arg Arg 120 Thr 129

<210> 1867 <211> 80 <212> PRT <213> Homo sapiens

<210> 1868 <211> 113 <212> PRT <213> Homo sapiens

<400> 1868 Met Leu Val Trp Leu Tyr Gly Thr Ile Arg Trp Pro Ala Leu Gly Ala 10 Pro Arg Trp Trp Pro Trp Val Trp Pro Pro Gly Val Trp Ser Gly Ile 20 25 Glu Thr Pro Ser Ser Thr Pro Arg Ala Arg Ser Leu Arg Gly Thr Gly 40 Gly Ala Val Thr Arg Arg Thr Gly Ser Ser Phe Pro Trp Thr Thr Thr 55 Thr Arg Pro Ser Ser Trp Trp Thr Thr Ala His Thr Ala Ala Trp Gly
65 70 75 70 Ala Arg Thr Ala Ser Ala Cys Ala Trp Ser Pro Thr Ser His Ser Lys 85 90 Thr Arg Pro Trp Gln Gly Leu Glu Leu Thr Ser Leu Ala Cys Ser Ser 105

<210> 1869 <211> 72 <212> PRT <213> Homo sapiens

 Ser Asp
 Ser Ser Thr
 Ile Leu Cys
 Ser Arg
 Asp
 Leu Ile Leu Glu Ser
 30

 Ile Ala Leu Ile Ile Ala Phe Cys
 Ser Leu Arg Ile Leu Pro Phe Ser
 45

 Trp Ala Ser Ser Ser Cys
 Leu Cys
 Ile Met Phe Ser Ser Ser Val Ser Leu

 50
 55
 60

 Ser Ala Arg
 Ser Phe Phe Ile *

 65
 70
 71

<210> 1870 <211> 197 <212> PRT <213> Homo sapiens

<400> 1870 Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala His 5 10 Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro Glu Gly Thr 40 Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr Gly Glu Arg Asp 55 Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr Arg Lys Ser Cys Asn 70 75 Leu Thr Val Glu Thr Gly Asn Leu Thr Glu Leu Tyr Tyr Ala Arg Val 85 90 Thr Ala Val Ser Ala Gly Gly Arg Ser Ala Thr Lys Met Thr Asp Arg 100 105 Phe Ser Ser Leu Gln His Thr Thr Leu Lys Pro Pro Asp Val Thr Cys 120 125 Ile Ser Lys Val Arg Ser Ile Gln Met Ile Val His Pro Thr Pro Thr 135 140 Pro Ile Arg Ala Gly Asp Gly His Arg Leu Thr Leu Glu Asp Ile Phe 150 155 His Asp Leu Phe Tyr His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln 170 165 Met Val Ser Val Cys Cys Thr Leu Val Phe Leu Cys Leu Gly Ser Leu 180 Phe Pro Pro Asn

<210> 1871 <211> 75 <212> PRT <213> Homo sapiens

195 196

35 40 45
Arg Glu Ser Arg Ala Cys Ala Pro Gly Glu Arg Pro Asn Phe Leu Gly
50 55 60
Ile Arg Glu Gln Arg Leu Thr Gly Leu Val Val
65 70 75

<210> 1872 <211> 84 <212> PRT <213> Homo sapiens

<400> 1872 Met Pro Phe Ser Thr Cys Thr Ala Leu Pro Ser Trp Ala Thr Leu Ser 5 10 Thr Trp Ser Trp Thr Pro Lys Val Ser Leu Ala Gly Glu Glu Arg Gly 25 20 Glu Thr Cys Gln Pro Asp Pro Phe Pro Pro His Pro Ser Cys Ser Val 35 40 45 Gly Arg Thr Pro Pro His Ser Ser Leu Gly Ser Pro Pro Thr Thr Leu 55 60 Phe Leu Ser Pro Leu Leu Arg Val Glu Ser Arg Gly Ala Lys Cys Val 70 Val Cys Cys * 83

<210> 1873 <211> 51 <212> PRT <213> Homo sapiens

<210> 1874 <211> 503 <212> PRT <213> Homo sapiens

```
Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu Arg Asp Leu
Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly Asp Tyr Ser Ile
                       55
Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp Ala Ser Ile Arg Leu
Leu Lys Ala Thr Lys Ile Cys Val Thr Gly Lys Ser Asn Phe Gln Ser
                                 90
Tyr Ser Cys Val Arg Cys Asn Tyr Thr Glu Ala Phe Gln Thr Gln Thr
                            105
         100
Arg Pro Ser Gly Gly Lys Trp Thr Phe Ser Tyr Ile Gly Phe Pro Val
                                            125
                          120
Glu Leu Asn Thr Val Tyr Phe Ile Gly Ala His Asn Ile Pro Asn Ala
                      135
Asn Met Asn Glu Asp Gly Pro Ser Met Ser Val Asn Phe Thr Ser Pro
                                     155
                  150
Gly Cys Leu Asp His Ile Met Lys Tyr Lys Lys Lys Cys Val Lys Ala
                                170
Gly Ser Leu Trp Asp Pro Asn Ile Thr Ala Cys Lys Lys Asn Glu Glu
                             185
           180
Thr Val Glu Val Asn Phe Thr Thr Thr Pro Leu Gly Asn Arg Tyr Met
                          200
Ala Leu Ile Gln His Ser Thr Ile Ile Gly Phe Ser Gln Val Phe Glu
                      215
                                        220
Pro His Gln Lys Lys Gln Thr Arg Ala Ser Val Val Ile Pro Val Thr
                  230
                                    235
Gly Asp Ser Glu Gly Ala Thr Val Gln Leu Thr Pro Tyr Phe Pro Thr
                                250
              245
Cys Gly Ser Asp Cys Ile Arg His Lys Gly Thr Val Val Leu Cys Pro
                             265
           260
Gln Thr Gly Val Pro Phe Pro Leu Asp Asn Asn Lys Ser Lys Pro Gly
                         280
                                            285
Gly Trp Leu Pro Leu Leu Leu Ser Leu Leu Val Ala Thr Trp Val
            295
                                        300
Leu Val Ala Gly Ile Tyr Leu Met Trp Arg His Glu Arg Ile Lys Lys
                 310
                                    315
Thr Ser Phe Ser Thr Thr Thr Leu Leu Pro Pro Ile Lys Val Leu Val
              325
                                330
Val Tyr Pro Ser Glu Ile Cys Phe His His Thr Ile Cys Tyr Phe Thr
                   345
                                               350
Glu Phe Leu Gln Asn His Cys Arg Ser Glu Val Ile Leu Glu Lys Trp
                         360
                                             365
Gln Lys Lys Lys Ile Ala Glu Met Gly Pro Val Gln Trp Leu Ala Thr
                     375
                                         380
Gln Lys Lys Ala Ala Asp Lys Val Val Phe Leu Leu Ser Asn Asp Val
                  390
Asn Ser Val Cys Asp Gly Thr Cys Gly Lys Ser Glu Gly Ser Pro Ser
                                 410
               405
Glu Asn Ser Gln Asp Leu Phe Pro Leu Ala Phe Asn Leu Phe Cys Ser
                              425
           420
                                                430
Asp Leu Arg Ser Gln Ile His Leu His Lys Tyr Val Val Val Tyr Phe
                          440
       435
Arg Glu Ile Asp Thr Lys Asp Asp Tyr Asn Ala Leu Ser Val Cys Pro
                      455
                                        460
Lys Tyr His Leu Met Lys Asp Ala Thr Ala Phe Cys Ala Glu Leu Leu
                  470
                                     475
His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys His
               485
                                 490
Asp Gly Cys Cys Ser Leu *
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500 502

<210> 1875

<211> 158

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(158)

<223> Xaa = any amino acid or nothing

<400> 1875

Met Xaa Pro Pro Thr Arg Pro Arg Thr Arg Gly Val Gly Ile Phe Tyr 10 Phe Val Ile Tyr Ile Ile Ile Ser Phe Leu Val Val Asn Met Tyr 20 25 Ile Ala Val Ile Leu Glu Asn Phe Ser Val Ala Thr Glu Glu Ser Thr 40 Glu Pro Leu Ser Glu Asp Asp Phe Glu Met Phe Tyr Glu Val Trp Glu 55 60 Lys Phe Asp Pro Asp Ala Thr Gln Phe Ile Glu Phe Ser Lys Leu Ser 70 Asp Phe Ala Ala Ala Leu Asp Pro Pro Leu Leu Ile Ala Lys Pro Asn 85 90 Lys Val Gln Leu Ile Ala Met Asp Leu Pro Met Val Ser Gly Asp Arg 105 100 110 Ile His Cys Leu Asp Ile Leu Phe Ala Phe Thr Lys Arg Val Leu Gly

Ile His Cys Leu Asp Ile Leu Phe Ala Phe Thr Lys Arg Val Leu Gly
115 120 125
Glu Ser Gly Glu Met Asp Ser Leu Arg Ser Gln Met Glu Glu Arg Phe

130 135 140
Met Ser Ala Asn Pro Ser Lys Val Ser Tyr Glu Pro Ile Thr

<210> 1876

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1876

Met Gly Asn Arg Ala Val Ile Ile Ala Arg Gln Leu Ser Ser Val His 1 5 10 15

Thr Leu Ile Cys Asn Phe Phe Trp Leu Leu Leu Arg Thr Thr Gly Gly
20 25 30

Asp Leu Asp Ser Leu Lys Cys Ser Tyr Glu Ser Ile Gly Leu Asn Ser 35 40

Ile Ser Thr His Glu Phe Ile Cys Thr Trp Gln Arg Arg Leu Asn Phe 50 60

Ser Phe Val Met Ser Phe Lys Pro Leu Phe Arg Ala Ser Pro His Ser 65 70 75 80

Tyr Leu Leu Ile Ile Gly Ser Gln Leu His Glu Thr Phe Asn Leu Gly
85 90 95

Ser Ile Ser Ser Glu Glu Lys Cys Ser * 100 105

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<210> 1877
<211> 241
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1) ... (241)
<223> Xaa = any amino acid or nothing
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<400> 1877 Met Leu Trp Ala Leu Trp Pro Arg Trp Leu Ala Asp Lys Met Leu Pro 1 . 5 10 Leu Leu Gly Ala Val Leu Leu Gln Lys Arg Glu Lys Arg Gly Pro Leu 25 Trp Arg His Trp Arg Arg Glu Thr Tyr Pro Tyr Tyr Asp Leu Gln Val 40 Lys Val Leu Arg Ala Thr Asn Ile Arg Gly Thr Asp Leu Leu Ser Lys 55 60 Ala Asp Cys Tyr Val Gln Leu Trp Leu Pro Thr Ala Ser Pro Ser Pro 70 75 Ala Gln Thr Arg Ile Val Ala Asn Cys Ser Asp Pro Glu Trp Asn Glu Thr Phe His Tyr Gln Ile His Gly Ala Val Lys Asn Val Leu Glu Leu 100 105 Thr Leu Tyr Asp Lys Asp Ile Leu Gly Ser Asp Gln Leu Ser Leu Leu 120 125 Leu Phe Asp Leu Arg Ser Leu Lys Cys Gly Gln Pro His Lys His Thr 135 140 Phe Pro Leu Asn His Gln Asp Ser Gln Glu Leu Gln Val Glu Phe Val 150 155 Leu Glu Lys Ser Gln Glu Pro Ala Ser Glu Val Ile Thr Asn Gly Val 165 170 Leu Gly Ala His Pro Trp Leu Arg Met Lys Gly Met Ile Leu Gly Glu 185 Gly Arg Ala Pro Arg Gln Gln His Gly Gln Ser Trp Glu Gly Gly Val 200 Gly Pro Ser Pro Leu Ser Xaa Xaa Xaa Asn Thr Gly Gly Lys Ile Val 210 215 220 Gly Phe Trp Glu Glu Met Ala Asn Gly Thr Gly Ala Pro Pro Arg Pro 230 235 Pro 241

<210> 1878 <211> 50 <212> PRT <213> Homo sapiens

<400> 1878

Met Leu Leu Met Leu Leu Phe Arg Cys Cys Ser Ser Lys Asp Leu Trp

1 5 10 15

Pro Val Leu Ile Ala His Leu Val Pro Gln Gly Gly Gln Glu Gly Asn

```
20 25 30
Val Gly Glu Gln Thr Lys Gly Lys Ser Asn Arg Val Leu Pro Val Phe
35 40 45

Leu *
49

<210> 1879
<211> 56
<212> PRT
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<400> 1879

<213> Homo sapiens

 Met Cys
 Ser Ala Phe
 Ser Ser Phe
 Trp Trp Val Pro Pro Leu Ala Gly

 1
 5
 10
 15

 Ser Gly Val Lys
 Leu Gln Thr Phe
 Thr Ala Ser Val Thr Ala His Lys

 20
 25
 30

 Arg Ser Thr Asp Pro Lys
 Ser Glu Gln Leu Asp Leu Ser Gln Arg

 35
 40
 45

 Thr Lys
 Glu Gln Ser Leu Thr Lys
 55

 50
 55
 56

<210> 1880 <211> 161 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1) ... (161) <223> Xaa = any amino acid or nothing

<400> 1880 Met Pro Ser Ala Ser Leu Leu Val Asn Leu Leu Ser Ala Leu Leu Ile 1 5 10 Leu Phe Val Phe Gly Glu Thr Glu Ile Arg Phe Thr Gly Gln Thr Glu 20 Phe Val Val Asn Glu Thr Ser Thr Thr Val Ile Arg Leu Ile Ile Glu 40 Arg Ile Gly Glu Pro Ala Asn Val Thr Ala Ile Val Ser Leu Tyr Gly 55 Glu Asp Ala Gly Asp Phe Phe Asp Thr Tyr Ala Ala Ala Phe Ile Pro 70 75 Ala Gly Glu Thr Asn Arg Thr Val Tyr Ile Ala Val Cys Asp Asp 85 90 Leu Pro Glu Pro Asp Glu Thr Phe Ile Phe His Leu Thr Leu Gln Lys 100 105 Pro Ser Ala Asn Val Lys Leu Gly Trp Pro Arg Thr Val Thr 120 Ile Leu Ser Asn Gly Gln Met Ala Phe Trp Glu Phe Ile Phe Ile Leu 135 140 Asn Ile Gly Leu Pro Pro Pro Ile Pro Pro Ser Gly Xaa Leu Lys Ala 150 155 · Pro 161

<210> 1881 <211> 130 <212> PRT <213> Homo sapiens

<400> 1881 Met Gly Ile Tyr Gln Met Tyr Leu Cys Phe Leu Leu Ala Val Leu Leu 5 10 Gln Leu Tyr Val Ala Thr Glu Ala Ile Leu Ile Ala Leu Val Gly Ala 25 Thr Pro Ser Tyr His Trp Asp Leu Ala Glu Leu Leu Pro Asn Gln Ser 40 His Gly Asn Gln Ser Ala Gly Glu Asp Gln Ala Phe Gly Asp Trp Leu 55 Leu Thr Ala Asn Gly Ser Glu Ile His Lys His Val His Phe Ser Ser 70 75 Ser Phe Thr Ser Ile Ala Ser Glu Trp Phe Leu Ile Ala Asn Arg Ser 90 Tyr Lys Val Ser Ala Ala Ser Ser Phe Phe Phe Ser Gly Val Phe Val . 105 100 Gly Val Ile Ser Phe Gly Gln Leu Ser Asp Arg Phe Gly Arg Lys Lys 120 Val Tyr 130

<210> 1882 <211> 108 <212> PRT <213> Homo sapiens

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<400> 1882

Met Leu Trp Phe Ser Gly Val Gly Ala Leu Ala Glu Arg Tyr Cys Arg 5 10 Arg Ser Pro Gly Ile Thr Cys Cys Val Leu Leu Leu Leu Asn Cys Ser 20 25 Gly Val Pro Met Ser Leu Ala Ser Ser Phe Leu Thr Gly Ser Val Ala 40 45 Lys Cys Glu Asn Glu Gly Glu Val Leu Gln Ile Pro Phe Ile Thr Asp 55 Asn Pro Cys Ile Met Cys Val Cys Leu Asn Lys Glu Val Thr Cys Lys 70 75 Arg Glu Lys Cys Pro Val Leu Ser Arg Asp Cys Ala Leu Ala Ile Lys 85 90 Gln Arg Gly Ala Cys Cys Glu Gln Cys Lys Gly Cys 105

<210> 1883 <211> 88 <212> PRT <213> Homo sapiens

 Ala Ret Leu Phe Tyr
 Leu Val Ser Val Cys
 Leu Cys
 Val Ala
 Val Ile
 Val 11
 Val 15
 Val 16
 Val 17
 Val 16
 Val 17
 Val 16
 Val 17
 Val 18
 Val 19
 Val 19
 Val 18
 Val 18

<210> 1884 <211> 116 <212> PRT <213> Homo sapiens

<400> 1884 Met Cys Trp Ala Arg Cys Trp Thr Arg Trp Asn Thr Cys Thr Ile Trp Thr Ser Ser Thr Asp Pro Phe Arg Lys Cys Trp Met Ala Pro Glu Ala 25 Leu Asn Phe Ser Phe Ser His Lys Ser Asp Ile Trp Ser Leu Gly Cys 40 Ile Ile Leu Asp Met Thr Ser Cys Ser Phe Met Asp Gly Thr Glu Ala 55 Met His Leu Arg Lys Ser Leu Arg Gln Ser Pro Gly Ser Leu Lys Ala 70 Val Leu Lys Thr Met Glu Glu Lys Gln Ile Pro Asp Val Glu Thr Phe 85 90 Arg Asn Leu Leu Pro Leu Met Leu Gln Ile Asp Pro Ser Asp Arg Ile Thr Ile Lys * 115

<210> 1885 <211> 115 <212> PRT <213> Homo sapiens

Gln Thr Val Lys Cys Ser Cys Phe Ser Gly Gln Val Ala Gly Thr Thr
65 70 75 80

Arg Ala Lys Pro Ser Cys Val Asp Asp Leu Leu Leu Ala Ala His Cys
85 90 95

Ala Arg Arg Asp Pro Arg Ala Ala Leu Arg Leu Leu Leu Pro Gln Pro
100 105 110

Pro Ser Ser
115

<210> 1886 <211> 357 <212> PRT <213> Homo sapiens

<400> 1886 Met Ile Leu Ser Leu Leu Phe Ser Leu Gly Gly Pro Leu Gly Trp Gly 10 Leu Leu Gly Ala Trp Ala Gln Ala Ser Ser Thr Ser Leu Ser Asp Leu 25 Gln Ser Ser Arg Thr Pro Gly Val Trp Lys Ala Glu Ala Glu Asp Thr Gly Lys Asp Pro Val Gly Arg Asn Trp Cys Pro Tyr Pro Met Ser Lys 55 Leu Val Thr Leu Leu Ala Leu Cys Lys Thr Glu Lys Phe Leu Ile His Ser Gln Gln Pro Cys Pro Gln Gly Ala Pro Asp Cys Gln Lys Val Lys 85 90 Val Met Tyr Arg Met Ala His Lys Pro Val Tyr Gln Val Lys Gln Lys Val Leu Thr Ser Leu Ala Trp Arg Cys Cys Pro Gly Tyr Thr Gly Pro 120 Asn Cys Glu His His Asp Ser Met Ala Ile Pro Glu Pro Ala Asp Pro 135 . 140 Gly Asp Ser His Gln Glu Pro Gln Asp Gly Pro Val Ser Phe Lys Pro 150 155 Gly His Leu Ala Ala Val Ile Asn Glu Val Glu Val Gln Gln Gln Gln . 165 170 Gln Glu His Leu Leu Gly Asp Leu Gln Asn Asp Val His Arg Val Ala 185 Asp Ser Leu Pro Gly Leu Trp Lys Ala Leu Pro Gly Asn Leu Thr Ala 200 Ala Val Met Glu Ala Asn Gln Thr Gly His Glu Phe Pro Asp Arg Ser 215 220 Leu Glu Gln Val Leu Leu Pro His Val Asp Thr Phe Leu Gln Val His 230 235 Phe Ser Pro Ile Trp Arg Ser Phe Asn Gln Ser Leu His Ser Leu Thr 245 250 . Gln Ala Ile Arg Asn Leu Ser Leu Asp Val Glu Ala Asn Arg Gln Ala 260 265 Ile Ser Arg Val Gln Asp Ser Ala Val Ala Arg Ala Asp Phe Gln Glu 280 285 Leu Gly Ala Lys Phe Glu Ala Lys Val Gln Glu Asn Thr Gln Arg Val 295 300 Gly Gln Leu Arg Gln Asp Val Glu Asp Arg Leu His Ala Gln His Phe 310 315 Thr Leu His Arg Ser Ile Ser Glu Leu Gln Ala Asp Val Asp Thr Lys

 Leu Lys Arg
 Leu His Lys Ala Gln Glu Ala Pro Gly Thr Asn Gly Ser

 Leu Val Leu Glu Arg
 345

 355
 357

<210> 1887 <211> 86 <212> PRT <213> Homo sapiens

<400> 1887

 Met
 Leu
 Cys
 Ser
 Arg
 Leu
 Gly
 Thr
 Thr
 Ala
 Ser
 Trp
 Arg
 Leu
 Gly

 Ile
 Arg
 Ala
 Trp
 Ala
 Pro
 Leu
 Leu
 Leu
 Pro
 Pro
 Pro
 Trp
 Arg
 Pro
 His
 Arg
 Pro
 Trp
 Ala
 Gly
 Trp
 Ala
 Arg
 Pro
 Arg
 Pro
 Trp
 Ala
 Gly
 Trp
 Arg
 Arg
 Pro
 Trp
 Pro
 Arg
 Arg
 Pro
 Trp
 Ala
 Gly
 Trp
 Arg
 Arg
 Arg
 Arg
 Arg
 Trp
 Pro
 Trp
 Pro
 Trp
 Arg
 Arg
 Pro
 Arg
 Arg

<210> 1888 <211> 48 <212> PRT <213> Homo sapiens

<400> 1888

Met Ser Val Arg Arg Ala Leu Thr Pro Ser Ala Leu Gly Leu Val Phe

1 5 10 15

Ile Leu Gln Ile Phe Ala His Gly Leu Pro Gly Pro Gly Pro Cys His

20 25 30

Leu Gly Pro Gly Ile Cys Leu Arg Ile Cys Gln Cys Ala Leu Asn *

<210> 1889 <211> 79 <212> PRT <213> Homo sapiens

<400> 1889

 Met Ser Val
 Val
 Met Leu Ser Tyr
 Leu Ser Ala Phe Phe Ser Gln

 1
 5
 5
 10
 15

 Ala Asn Thr Ala Ala Leu Cys
 Thr Ser Leu Val Tyr Met Ile Ser Phe 20
 30

 Leu Pro Tyr
 Ile Val Leu Leu Val Leu His Asn Gln Leu Ser Phe Val 35

Asn Gln Thr Phe Leu Cys Leu Leu Ser Thr Thr Ala Phe Gly Gln Gly 50 55 60

Val Phe Phe Ile Thr Phe Leu Glu Gly Gln Glu Thr Gly Ile His 65 70 75 79

<210> 1890 <211> 251 <212> PRT <213> Homo sapiens

<400> 1890 Met Asn Val Ile Tyr Phe Pro Leu His Leu Phe Val Val Tyr Ser Arg 5 10 Ala Tyr Thr Ser Leu Val Leu Val Gly Cys Thr Asn Leu Cys Ala Val 20. 25 Leu Phe Ala Arg Cys Leu Asp Asp His Leu Val Ser Leu Arg Met Ser 40 Gly Ser Arg Lys Glu Phe Asp Val Lys Gln Ile Leu Lys Ile Arg Trp 55 Arg Trp Phe Gly His Gln Ala Ser Ser Pro Asn Ser Thr Val Asp Ser 70 Gln Gln Gly Glu Phe Trp Asn Arg Gly Gln Thr Gly Ala Asn Gly Gly 85 90 Arg Lys Phe Leu Asp Pro Cys Ser Leu Gln Leu Pro Leu Ala Ser Ile 100 105 Gly Tyr Arg Arg Ser Ser Gln Leu Asp Phe Gln Asn Ser Pro Ser Trp 120 125 Pro Met Ala Ser Thr Ser Glu Val Pro Ala Phe Glu Phe Thr Ala Glu 135 140 Asp Cys Gly Gly Ala His Trp Leu Asp Arg Pro Glu Val Asp Asp Gly 150 155 Thr Ser Glu Glu Glu Asn Glu Ser Asp Ser Ser Ser Cys Arg Thr Ser 165 170 175 Asn Ser Ser Gln Thr Leu Ser Ser Cys His Thr Met Glu Pro Cys Thr 180 185 Ser Asp Glu Phe Phe Gln Ala Leu Asn His Ala Glu Gln Thr Phe Lys 195 200 Lys Met Glu Asn Tyr Leu Arg His Lys Gln Leu Cys Asp Val Ile Leu 215 220 Val Ala Gly Asp Arg Arg Ile Pro Ala His Arg Leu Val Leu Ser Ser 230 235 Val Ser Asp Tyr Phe Ala Gly Met Phe Thr Asn 245

<210> 1891 <211> 117 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(117) <223> Xaa = any amino acid or nothing

<400> 1891 Met Leu Ile Asp Val Phe Phe Phe Leu Phe Leu Phe Ala Xaa Trp Met 10 Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu Arg Gln Asn Glu Gln 20 25 Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr Glu Pro Tyr Leu Ala 35 40 Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly Thr Thr Tyr Asp Phe 55 60 Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys Pro Leu Cys Val Glu 65 70 75 Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu Trp Ile Thr Ile Pro 85 90 Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile Leu Leu Val Asn Leu 100 105 Leu Val Ala Met Phe 115 117

<210> 1892 <211> 103 <212> PRT <213> Homo sapiens

<400> 1892 Met Leu Cys His Pro His Val His His Leu Val Cys Leu Leu Ala 10 Thr Leu Thr Phe Ser Leu Asn Ala Ser Cys Ala Glu Gln Thr Phe His 25 Ser Gln Gln Ser Asn Gly Glu Phe Met Ala Thr Leu Pro Ser Ile Ser 40 Lys Gin Phe Gly Val Ile Val Trp Lys Pro Gln Arg Lys Asp Val Ile 55 Arg Leu Pro Val Ala Leu Ser Phe Ser Ser Gly Ala Arg Leu Ala Phe 70 Thr Cys Leu Arg Lys Ile Ser Gly Phe Arg Ala Leu Ile Trp Gly Glu 85 90 Asp Lys Gly Trp Asp Leu * 100 102

<210> 1893
<211> 77
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1)...(77)
<223> Xaa = any amino acid or nothing

<210> 1894 <211> 46 <212> PRT <213> Homo sapiens

<210> 1895 <211> 162 <212> PRT <213> Homo sapiens

<400> 1895 Met Thr Ala Trp Arg Phe Gln Ser Leu Leu Leu Leu Gly Leu 10 Leu Val Leu Cys Ala Arg Leu Leu Thr Ala Ala Lys Gly Gln Asn Cys 20 25 Gly Gly Leu Val Gln Gly Pro Asn Gly Thr Ile Glu Ser Pro Gly Phe 40 Pro His Gly Tyr Pro Asn Tyr Ala Asn Cys Thr Trp Ile Ile Ile Thr 50 55 Gly Glu Arg Asn Arg Ile Gln Leu Ser Phe His Thr Phe Ala Leu Glu 70 75 80 Glu Asp Phe Asp Ile Leu Ser Val Tyr Asp Gly Gln Pro Gln Gln Gly 85 90 95 Asn Leu Lys Val Arg Leu Ser Gly Phe Gln Leu Pro Ser Ser Ile Val 105 Ser Thr Gly Ser Ile Leu Thr Leu Trp Phe Thr Thr Asp Phe Ala Val 125 115 120 Ser Ala Gln Gly Phe Lys Ala Leu Tyr Glu Gly Arg Arg Leu Val Val 135 140 Phe Cys Thr Cys Ile His Cys Pro Asn Asp Leu Ile His Ala Thr Leu 150 155 * qaA 161

<210> 1896 <211> 60

<212> PRT <213> Homo sapiens

<210> 1897 <211> 49 <212> PRT <213> Homo sapiens

<210> 1898 <211> 52 <212> PRT <213> Homo sapiens

<210> 1899 <211> 112 <212> PRT <213> Homo sapiens

<400> 1899

 Met
 Ala
 Ile
 Pro
 Ser
 Val
 Val
 Ile
 Ser
 Gly
 Leu
 Ala
 Val
 Leu
 Val

 Ala
 Met
 Ala
 Leu
 Pro
 Ser
 Leu
 Ser
 Gly
 Ser
 Glu
 Ala
 Ile
 Lys
 Ser
 Met

 Ala
 Met
 Ala
 Leu
 Val
 Val
 Pro
 Thr
 Val
 Val
 Ala
 Val
 Val

<210> 1900 <211> 128 <212> PRT <213> Homo sapiens

<400> 1900 Met Arg Val Tyr Gly Thr Cys Thr Leu Val Leu Met Ala Leu Val Val 10 Phe Val Gly Val Lys Tyr Val Asn Lys Leu Ala Leu Val Phe Leu Ala · 30 20 25 Cys Val Val Leu Ser Ile Leu Ala Ile Tyr Ala Gly Val Ile Lys Ser 40 Ala Phe Asp Pro Pro Asp Ile Pro Val Cys Leu Leu Gly Asn Arg Thr 55 Leu Ser Arg Arg Ser Phe Asp Ala Cys Val Lys Ala Tyr Gly Ile His 70 Asn Asn Ser Ala Thr Ser Ala Leu Trp Gly Leu Phe Cys Asn Gly Ser 85 90 Gln Pro Ser Ala Ala Cys Asp Glu Tyr Phe Ile Gln Asn Asn Val Thr 105 Glu Ile Gln Gly Ile Pro Gly Ala Ala Ser Gly Val Phe Leu Glu Asn

<210> 1901 <211> 68 <212> PRT <213> Homo sapiens

<400> 1901

 Met Glu Leu Leu Leu Lys Leu Leu Leu Thr Cys Phe Ser Glu Ala Met Tyr
 1
 15

 1
 5
 10
 15

 Leu Pro Pro Ala Pro Glu Ser Gly Ser Thr Asn Pro Trp Val Gln Phe
 20
 25

 Phe Cys Ser Thr Glu Asn Arg His Ala Leu Pro Leu Phe Thr Ser Leu

35 40 45
Leu Asn Thr Val Cys Ala Tyr Asp Pro Val Glu Tyr Gly Ile Pro Tyr
50 55 60
Asn His Leu Tyr
65 68

<210> 1902 <211> 127 <212> PRT <213> Homo sapiens

<400> 1902 Met Tyr Phe Ser Ser Leu Phe Pro Tyr Val Val Leu Ala Cys Phe Leu 5 10 Val Arg Gly Leu Leu Leu Arg Gly Ala Val Asp Gly Ile Leu His Met 20 25 Phe Thr Pro Lys Leu Asp Lys Met Leu Asp Pro Gln Val Trp Arg Glu 40 45 Ala Ala Thr Gln Val Phe Ser Ala Leu Gly Leu Gly Phe Gly Gly Val 55 Ile Ala Phe Ser Ser Tyr Asn Lys Gln Asp Asn Asn Cys His Phe Asp 70 75 Ala Ala Leu Val Ser Phe Ile Asn Phe Phe Thr Ser Val Leu Ala Thr 85 90 Leu Val Val Phe Ala Val Leu Gly Phe Lys Ala Asn Ile Met Asn Glu 100 105 110 Lys Cys Val Val Glu Asn Ala Glu Lys Ile Leu Gly Tyr Arg Val 115 120

<210> 1903 <211> 83 <212> PRT <213> Homo sapiens

<210> 1904 <211> 129 <212> PRT

<213> Homo sapiens

<400> 1904 Met Lys Met Phe Val Ala His Gly Phe Tyr Ala Ala Lys Phe Val Val 10 Ala Ile Gly Ser Val Ala Gly Leu Thr Val Ser Leu Leu Gly Ser Leu Phe Pro Met Pro Arg Val Ile Tyr Ala Met Ala Gly Asp Gly Leu Leu 40 Phe Arg Phe Leu Ala His Val Ser Ser Tyr Thr Glu Thr Pro Val Val 55 Ala Cys Ile Val Ser Gly Phe Leu Ala Ala Leu Leu Ala Leu Leu Val 75 70 Ser Leu Arg Asp Leu Ile Glu Met Met Ser Ile Gly Thr Leu Leu Ala 90 85 Tyr Thr Leu Val Ser Val Cys Val Leu Leu Leu Arg His His Pro Glu 105 110 Ser Asp Ile Asp Gly Phe Val Lys Phe Leu Ser Glu Glu His Thr Cys 120 Ser 129

<210> 1905 <211> 93 <212> PRT <213> Homo sapiens

<210> 1906 <211> 66 <212> PRT <213> Homo sapiens

35 40 45
Leu Ala Ser Gln His Ile Val Arg Thr Asp Leu His Val Gln Gly Pro
50 55 60
Cys Ile
65 66

<210> 1907 <211> 105 <212> PRT <213> Homo sapiens

<400> 1907 Met Leu Gln Leu Gly Pro Phe Leu Tyr Trp Thr Phe Leu Ala Ala Phe 10 Glu Gly Thr Val Phe Phe Phe Gly Thr Tyr Phe Leu Phe Gln Thr Ala 20 25 Ser Leu Glu Glu Asn Gly Lys Val Tyr Gly Asn Trp Thr Phe Gly Thr 40 45 Ile Val Phe Thr Val Leu Val Phe Thr Val Thr Leu Lys Leu Ala Leu 55 60 Asp Thr Arg Phe Trp Thr Trp Ile Asn His Phe Val Ile Trp Gly Ser 70 75 Leu Ala Phe Tyr Val Phe Phe Ser Phe Phe Trp Gly Gly Ile Ile Trp 85 90 Pro Phe Leu Lys Gln Gln Arg Met Ala 100

<210> 1908 <211> 46 <212> PRT <213> Homo sapiens

<210> 1909 <211> 139 <212> PRT <213> Homo sapiens

<210> 1910 <211> 104 <212> PRT <213> Homo sapiens

<400> 1910 Met Glu Gly Trp Phe Ala Val Leu Ser Thr Ala Asn Asp Val Leu Gly 5 10 Ala Pro Trp Asn Trp Leu Tyr Phe Ile Pro Leu Leu Ile Ile Gly Ala 20 25 Phe Phe Val Pro Thr Leu Val Leu Gly Val Leu Ser Gly Asp Phe Ala 40 Lys Glu Arg Glu Arg Val Glu Thr Arg Arg Ala Phe Met Lys Leu Arg 55 Arg Gln Gln Gln Ile Glu Arg Glu Leu Asn Gly Tyr Arg Val Trp Ile 70 75 Ala Lys Ala Glu Glu Val Met Leu Ala Glu Glu Asn Leu Tyr Pro Ser 85 His Ala Arg Pro Val Asn Pro

<210> 1911 <211> 116

100

103

<212> PRT <213> Homo sapiens

<400> 1911

 Met Ala Val Ala Val Lou Leu Cys
 Gly Cys
 Ile Val Ala Thr Val Ser 15

 Phe Phe Trp Glu Glu Glu Ser Leu Thr Gln His Val Ala Gly Leu Leu Phe 20
 25
 30

 Leu Met Thr Gly Ile Phe Cys
 Thr Ile Ser Leu Cys
 Thr Tyr Ala Ala Ala 35

 Ser Ile Ser Tyr Asp Leu Asn Arg Leu Pro Lys
 Leu Ile Tyr Ser Leu 50

 Pro Ala Asp Val Glu His Gly Tyr Ser Trp Ser Ile Phe Cys Ala Trp 65
 70
 75
 80

 Cys Ser Leu Gly Phe Ile Val Ala Ala Gly Gly Leu Cys Ile Ala Tyr

85 90 95

Pro Phe Ile Ser Arg Thr Lys Ile Ala Gln Leu Lys Ser Gly Arg Asp
100 105 110

Ser Thr Val *
115

<210> 1912 <211> 105 <212> PRT <213> Homo sapiens

<400> 1912 Met Gln Leu Lys Thr Pro Ser Gly Gln Val Leu Ser Phe Cys Ile Leu 10 Gln Leu Phe Pro Phe Thr Ser Glu Ser Lys Arg Met Gly Val Ile Val 20 25 Arg Asp Glu Ser Thr Ala Glu Ile Thr Phe Tyr Met Lys Gly Ala Asp 40 Val Ala Met Ser Pro Ile Val Gln Tyr Asn Asp Trp Leu Glu Glu Glu 60 55 Cys Gly Asn Met Ala Arg Glu Gly Leu Arg Thr Leu Val Val Ala Lys 70 75 Lys Ala Leu Thr Glu Glu Gln Tyr Gln Asp Phe Glu Ser Arg Tyr Thr 85 Gln Ala Lys Leu Ser Met His Thr Lys 100

<210> 1913 <211> 141 <212> PRT <213> Homo sapiens

<400> 1913 Met Leu Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn 10 Phe Phe Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu 40 Gly Ile Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro 55 Asn Gln Pro Gly Arg Gln Glu Ala Pro Ala Asp Pro Trp Ala Phe Leu 75 70 Lys Leu Leu Gly Cys Pro Cys Arg Arg Pro Gln Leu Thr Cys Pro 85 90 95 Ser Leu Arg Asn Ser Gln Asp Pro Ile Cys His Pro Arg Ser Ser Asp 105 Pro His Pro Gly Ala Arg Pro Lys Arg Leu Leu Ala Ala Ser Ile Leu 120 125 Pro Met Thr Pro Thr Trp Gly Arg Lys Asn Pro Ser * 135

<210> 1914 <211> 556 <212> PRT <213> Homo sapiens

<400> 1914 Met Lys Lys Val Leu Leu Leu Leu Trp Lys Thr Val Leu Cys Thr Leu . 1 5 Gly Gly Phe Glu Glu Leu Gln Ser Met Lys Ala Glu Lys Arg Ser Ile 20 25 Leu Gly Leu Pro Pro Leu Pro Glu Asp Ser Ile Lys Val Ile Arg Asn 35 40 Met Arg Ala Ala Ser Pro Pro Ala Ser Ala Ser Asp Leu Ile Glu Gln 55 Gln Gln Lys Arg Gly Arg Glu His Lys Ala Leu Ile Lys Gln Asp 70 75 Asn Leu Asp Ala Phe Asn Glu Arg Asp Pro Tyr Lys Ala Asp Asp Ser 85 90 Arg Glu Glu Glu Glu Asn Asp Asp Asp Asn Ser Leu Glu Gly Glu 105 110 Thr Phe Pro Leu Glu Arg Asp Glu Val Met Pro Pro Pro Leu Gln His 120 125 Pro Gln Thr Asp Arg Leu Thr Cys Pro Lys Gly Leu Pro Trp Ala Pro 135 Lys Val Arg Glu Lys Asp Ile Glu Met Phe Leu Glu Ser Ser Arg Ser 150 155 Lys Phe Ile Gly Tyr Thr Leu Gly Ser Asp Thr Asn Thr Val Val Gly 165 170 Leu Pro Arg Pro Ile His Glu Ser Ile Lys Thr Leu Lys Gln His Lys 180 185 190 Tyr Thr Ser Ile Ala Glu Val Gln Ala Gln Met Glu Glu Glu Tyr Leu 195 200 Arg Ser Pro Leu Ser Gly Gly Glu Glu Glu Val Glu Gln Val Pro Ala 215 220 Glu Thr Leu Tyr Gln Gly Leu Leu Pro Ser Leu Pro Gln Tyr Met Ile 230 235 Ala Leu Leu Lys Ile Leu Leu Ala Ala Pro Thr Ser Lys Ala Lys 245 250 Thr Asp Ser Ile Asm Ile Leu Ala Asp Val Leu Pro Glu Glu Met Pro 260 265 Thr Thr Val Leu Gln Ser Met Lys Leu Gly Val Asp Val Asn Arg His 275 280 Lys Glu Val Ile Val Lys Ala Ile Ser Ala Val Leu Leu Leu Leu 295 300 Lys His Phe Lys Leu Asn His Val Tyr Gln Phe Glu Tyr Met Ala Gln 310 315 His Leu Val Phe Ala Asn Cys Ile Pro Leu Ile Leu Lys Phe Phe Asn 325 330 Gln Asn Ile Met Ser Tyr Ile Thr Ala Lys Asn Ser Ile Ser Val Leu 340 345 Asp Tyr Pro His Cys Val Val His Glu Leu Pro Glu Leu Thr Ala Glu 360 Ser Leu Glu Ala Gly Asp Ser Asn Gln Phe Cys Trp Arg Asn Leu Phe 375 380 Ser Cys Ile Asn Leu Leu Arg Ile Leu Asn Lys Leu Thr Lys Trp Lys 390 395 His Ser Arg Thr Met Met Leu Val Val Phe Lys Ser Ala Pro Ile Leu

405 410 Lys Arg Ala Leu Lys Val Lys Gln Ala Met Met Gln Leu Tyr Val Leu 425 430 Lys Leu Leu Lys Val Gln Thr Lys Tyr Leu Gly Arg Gln Trp Arg Lys 440 Ser Asn Met Lys Thr Met Ser Ala Ile Tyr Gln Lys Val Arg His Arg 455 460 Leu Asn Asp Asp Trp Ala Tyr Gly Asn Asp Leu Asp Ala Arg Pro Trp 470 475 Asp Phe Gln Ala Glu Glu Cys Ala Leu Arg Ala Asn Ile Glu Arg Phe 485 490 Asn Ala Arg Arg Tyr Asp Arg Ala His Ser Asn Pro Asp Phe Leu Pro 500 505 Val Asp Asn Cys Leu Gln Ser Val Leu Gly Gln Arg Val Asp Leu Pro 520 525 Glu Asp Phe Gln Met Asn Tyr Asp Leu Trp Leu Glu Arg Glu Val Phe 535 Ser Lys Pro Ile Ser Trp Glu Glu Leu Leu Gln *

<210> 1915 <211> 212 <212> PRT <213> Homo sapiens

210 211

<400> 1915 Met Phe Leu Val Ala Val Trp Trp Arg Phe Gly Ile Leu Ser Ile Cys 10 Met Leu Cys Val Gly Leu Val Leu Gly Phe Leu Ile Ser Ser Val Thr 25 Phe Phe Thr Pro Leu Gly Asn Leu Lys Ile Phe His Asp Asp Gly Val 40 Phe Trp Val Thr Phe Ser Cys Ile Ala Ile Leu Ile Pro Val Val Phe 55 Met Gly Cys Leu Arg Ile Leu Asn Ile Leu Thr Cys Gly Val Ile Gly 70 75 Ser Tyr Ser Val Val Leu Ala Ile Asp Ser Tyr Trp Ser Thr Ser Leu 85 90 Ser Tyr Ile Thr Leu Asn Val Leu Lys Arg Ala Leu Asn Lys Asp Phe 105 His Arg Ala Phe Thr Asn Val Pro Phe Gln Thr Asn Asp Phe Ile Ile 120 Leu Ala Val Trp Gly Met Leu Ala Val Ser Gly Ile Thr Leu Gln Ile 135 140 Arg Arg Glu Arg Gly Arg Pro Phe Phe Pro Pro His Pro Tyr Lys Leu 155 150 Trp Lys Gln Glu Arg Glu Arg Arg Val Thr Asn Ile Leu Asp Pro Ser 165 170 Tyr His Ile Pro Pro Leu Arg Glu Arg Leu Tyr Gly Arg Leu Thr Gln 185 Ile Lys Gly Leu Phe Gln Lys Glu Gln Pro Ala Gly Glu Arg Thr Pro 195 200 Leu Leu Leu *

<210> 1916 <211> 172 <212> PRT <213> Homo sapiens

<400> 1916 Met Cys Thr Pro Val Arg Val Ser Ile Val Cys Val Met Gly Ala Val 10 Gly Ala Val Trp Thr Ala Pro Leu Pro Leu Pro Trp Ala Pro Thr Pro Ser Ile His Leu Arg Glu Glu Gly Ala Ala Phe Pro Phe Cys Gly Val Cys Val Leu Arg Pro Arg Arg Ser Lys Trp Arg Ser Trp Asp Val Asn 55 60 Leu Gly Pro Arg Arg Gly Leu Leu Gly Cys Gly Pro Cys Pro Ser 70 75 Gly Lys Pro Arg Val His Leu Gln Arg Thr Arg Ser Gly Ala Gly Ala . 90 85 Glu Ala Gly Gly Leu Pro Thr Arg Gly Ser Met Arg Gly Cys Pro Phe 100 $\,$ 105 $\,$ 110 $\,$ Leu Gly Ser Ser Ala Ala Lys Cys Ser Leu Leu Arg Pro Pro Ser 115 120 125 Arg Gly Glu Ala Ser Pro Trp Leu Pro Glu Phe Met Thr His Pro Val 130 135 140 His His Gln Gln Leu Ala Cys Gly Ser Gly Trp Leu Gly Thr Lys His 145 150 155 Pro Gly Gly Thr Cys Ala Leu Gly Ser Thr Met * 165

<210> 1917 <211> 72 <212> PRT <213> Homo sapiens

<210> 1918 <211> 88 <212> PRT <213> Homo sapiens

<400> 1918 Met Thr Ser Leu Met Phe Leu Trp Arg Ala Leu Leu Glu Thr Ile Ser 10 Thr Asn Met Thr Phe Ser Leu Pro Leu Ala Ala Val Val Arg Ala Trp 20 25 Met Lys Pro Thr Gly Ser Gly Met Phe Leu Tyr Gln Tyr Leu Pro Val 40 45 Val Lys Ser Ser Gln Ala Val Phe Pro Val Val Ile Glu Ile Ser Ser 55 60 Ile Ser Gly Ser Ile Leu Pro Lys Phe Pro Met Leu Ser Leu Met Ser Leu His Thr Gly Ser Ile Ile 85 87

<210> 1919 <211> 54 <212> PRT <213> Homo sapiens

<210> 1920 <211> 114 <212> PRT <213> Homo sapiens

<400> 1920 Met His Pro Pro Leu Thr Pro Pro Thr Pro Leu Cys Leu Trp Leu Arg 10 1 5 Leu Leu Lys Ala Gln Ile Leu Ser Tyr Pro Val Pro Arg Phe Glu Thr 20 25 His Ser Leu Ile Ser Arg Cys Ser Gln Val Pro Pro Thr Phe Leu Trp 40 45 Asp Ile Lys Lys Gly Val Arg Gly Gln Arg Glu Pro Ser Gly Pro Leu 60 Leu Pro Tyr Thr Leu His Cys Pro Phe Ser Pro His Gln Asn Ala Gln 70 Arg Arg Cys Asp Asp Ala Thr Glu Asp Tyr Ala Thr Trp Ser Asn Arg 85 - 90 Ser Gly Gln His Asp Gln Leu Ser Arg Gly Cys Leu Leu Pro Phe Leu 105 Leu * 113

<210> 1921 <211> 139 <212> PRT <213> Homo sapiens

<400> 1921 Met Val Tyr Leu Tyr Ile Tyr Leu Asp Leu Phe Gln Phe Leu Ile Thr 10 Val Leu Gln Gly Phe Leu Phe Val Phe Glu Met Glu Phe His Ser Cys 25 Arg Pro Gly Gln Ser Ala Met Met Gln Ser Gln Leu Ala Ala Thr Ser 35 40 Ala Ser Arg Val Gln Val Ile Leu Val Val Ser Ala Pro Gln Glu Ala 55 Gly Thr Thr Gly Ala Arg His His Val Gln Leu Ile Phe Val Phe Leu 70 75 Leu Glu Met Gly Phe Cys His Val Gly Gln Ala Gly Leu Glu Leu Leu 85 90 Asn Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Arg 100 105 110 Gly Val Asn His Cys Ala Pro Pro Ile Asn Ser Leu Leu Thr Phe Gln 120 Ser Phe Ile His Leu Glu Cys Ile Val Ile * 135

<210> 1922 <211> 52 <212> PRT <213> Homo sapiens

<210> 1923 <211> 71 <212> PRT <213> Homo sapiens

<210> 1924 <211> 187 <212> PRT <213> Homo sapiens

(213) Homo Bapiem

<400> 1924 Met Leu Phe Ile Gln Tyr Leu Leu Pro Cys Leu Leu Leu Ser Ala Glu 10 Leu Ser Gly Thr Phe Phe Leu Tyr Asn Thr Cys His Leu His Val Pro 20 25 Cys Cys His Ser Leu Val Pro Thr Gly Pro Pro Ser Leu Ser Ser His 40 Phe Gln Ser Arg Gly Leu Cys Ala Pro Cys Ala Ser Ile Ala Asp Ser 55 60 Gly Ile Ala Asp Ser Gly Gly Asn Asn Leu Asn Phe Val Gly Ala Gly 75 70 Gly Val Ala Ser Gly His Leu Leu Ser Pro Leu Leu Gly Pro Gln Ser 85 90 Ser Pro Cys Pro His Cys Pro Arg Gly Gly Arg Leu Pro Ser Gln Pro 105 Leu Pro Leu Cys Ser Ala Arg Ser Trp Ala Gln Glu Ala Leu Arg Leu 120 Pro Ser Ser Ala Gln Leu Cys Pro Cys His Pro Leu Pro Arg Gly Leu 130 135 140 Gly Pro Val Ser Pro Ser Gly Leu Leu Ala Asn Ile Ser Tyr Arg His 150 155 Asn Trp Leu Leu Gly Ser Trp Pro Gly Trp Leu Ile Trp Gly Gly Lys 165 170 Asn Arg Gly Gly Leu Asn Ser Phe Leu Ala * 180 185 186

<210> 1925 <211> 50 <212> PRT <213> Homo sapiens

<210> 1926 <211> 47 <212> PRT <213> Homo sapiens

40

<210> 1927 <211> 149 <212> PRT <213> Homo sapiens

35

<400> 1927 Met Ala Thr Gly Leu Leu Ala Phe Leu Gly Leu Ala Ala Gly Gly Gln 5 10 Thr Leu Cys Pro Ala Gly Glu Leu Pro Gly His Ala Arg Ala Gln Ala 25 Ser Gly Ala Pro Gly Ser Val Leu Ile Ala Val Pro Gly Arg Arg Arg 35 40 Val His Thr Cys Gly Pro Gly Pro Ala Ala Pro Ser Thr Arg Gly Glu 55 60 Cys Pro Pro Pro Ala Leu Gly His Thr Arg Pro Ala Arg Pro Arg Pro Val Leu Leu Arg Pro Ser Cys Ser Pro Gly Ala Arg Gly Ala Gly Thr 85 90 Trp Cys Cys Ala Pro Ala Thr Gly His Ser Ala Pro Arg Gly Cys Pro 100 105 110 Pro Ala Arg Ala Ala Pro Thr Gly Ser Ala Thr Pro Ala Pro Pro Pro 120 125 Ala Ala Cys Ala Ala Phe His Ser Ala Trp Ser Val Pro Pro Ala Gly Arg Gln Gln Gly * 145 148

<210> 1928 <211> 446 <212> PRT <213> Homo sapiens

```
40
 Ile Ala Glu Cys Cys Ser Thr Pro Tyr Ser Leu Leu Gly Leu Val Phe
                      55
                                        60
 Thr Val Ser Phe Val Ala Leu Gly Val Leu Thr Leu Cys Lys Phe Tyr
                70
 Leu Gln Gly Tyr Arg Ala Phe Met Asn Asp Pro Ala Met Asn Arg Gly
              85
                      90
 Met Thr Glu Gly Val Thr Leu Leu Ile Leu Ala Val Gln Thr Gly Leu
                   105
 Ile Glu Leu Gln Val Val His Arg Ala Phe Leu Leu Ser Ile Ile Leu
                                 125
                120
 Phe Ile Val Val Ala Ser Ile Leu Gln Ser Met Leu Glu Ile Ala Asp
                     135
                                       140
 Pro Ile Val Leu Ala Leu Gly Ala Ser Arg Asp Lys Ser Leu Trp Lys
                   150
                                    155
 His Phe Arg Ala Val Ser Leu Cys Leu Phe Leu Leu Val Phe Pro Ala
              165
                                 170
 Tyr Met Ala Tyr Met Ile Cys Gln Phe Phe His Met Asp Phe Trp Leu
           180 185
 Leu Ile Ile Ser Ser Ser Ile Leu Thr Ser Leu Gln Val Leu Gly
                         200
                                           205
 Thr Leu Phe Ile Tyr Val Leu Phe Met Val Glu Glu Phe Arg Lys Glu
                     215
                                        220
 Pro Val Glu Asn Met Asp Asp Val Ile Tyr Tyr Val Asn Gly Thr Tyr
      230
                                   235
 Arg Leu Leu Glu Phe Leu Val Ala Leu Cys Val Val Ala Tyr Gly Val
              245
                               250
 Ser Glu Thr Ile Phe Gly Glu Trp Thr Val Met Gly Ser Met Ile Ile
                             265
 Phe Ile His Ser Tyr Tyr Asn Val Trp Leu Arg Ala Gln Leu Gly Trp
                         280
. Lys Ser Phe Leu Leu Arg Arg Asp Ala Val Asn Lys Ile Lys Ser Leu
                     295
                                      300
 Pro Ile Ala Thr Lys Glu Gln Leu Glu Lys His Asn Asp Ile Cys Ala
                310
                                   315
 Ile Cys Tyr Gln Asp Met Lys Ser Ala Val Ile Thr Pro Cys Ser His
                               330
 Phe Phe His Ala Gly Cys Leu Lys Lys Trp Leu Tyr Val Gln Glu Thr
                           345
 Cys Pro Leu Cys His Cys His Leu Lys Asn Ser Ser Gln Leu Pro Gly
                  360 . 365
 Leu Gly Thr Glu Pro Val Leu Gln Pro His Ala Gly Ala Glu Gln Asn
                     375
                                      380
 Val Met Phe Gln Glu Gly Thr Glu Pro Pro Gly Gln Glu His Thr Pro
                  390
                       395
 Gly Thr Arg Ile Gln Glu Gly Ser Arg Asp Asn Asn Glu Tyr Ile Ala
              405
                                410
Arg Arg Pro Asp Asn Gln Glu Gly Ala Phe Asp Pro Lys Glu Tyr Pro
          420
                            425
His Ser Ala Lys Asp Glu Ala His Pro Val Glu Ser Ala *
                         440
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<210> 1929

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1929 Met Val Leu Pro Leu Pro Trp Leu Ser Arg Tyr His Phe Leu Arg Leu 5 10 Leu Leu Pro Ser Trp Ser Leu Ala Pro Gln Gly Ser His Gly Cys Cys 20 25 Ser Gln Asn Pro Lys Ala Ser Met Glu Glu Gln Thr Asn Ser Arg Gly 40 Asn Gly Lys Met Thr Ser Pro Pro Arg Gly Pro Gly Thr His Arg Thr 55 Ala Glu Leu Ala Arg Ala Glu Glu Leu Leu Glu Gln Gln Leu Glu Leu 70 Tyr Gln Ala Leu Leu Glu Gly Gln Glu Gly Ala Trp Glu Ala Gln Ala 90 Leu Val Leu Lys Ile His Lys Leu Lys Glu Gln Met Arg Arg His Gln 100 105 Glu Ser Leu Gly Gly Gly Ala * 119

<210> 1930 <211> 122 <212> PRT <213> Homo sapiens

<400> 1930 Met Thr Trp Leu Val Leu Leu Gly Thr Leu Leu Cys Met Leu Arg Val 5 10 Gly Leu Gly Thr Pro Asp Ser Glu Gly Phe Pro Pro Arg Ala Leu His 20 25 Asn Cys Pro Tyr Lys Cys Ile Cys Ala Ala Asp Leu Leu Ser Cys Thr 40 Gly Leu Gly Leu Gln Asp Val Pro Ala Glu Leu Pro Ala Gly Thr Ala 55 Asp Leu Asp Leu Ser His Asn Ala Leu Gln Arg Met Arg Pro Gly Trp 70 75 Leu Ala Pro Leu Phe Gln Leu Arg Ala Leu His Leu Asp His Asn Glu 85 90 Leu His Ala Leu Asp Arg Gly Val Phe Val Asn Ala Ser Gly Leu Arg 105 Leu Leu Asp Leu Ser Ser Asn Ala Glu Phe 115 120

<210> 1931 <211> 73 <212> PRT <213> Homo sapiens

<400> 1931

35 40 . 45

Arg Pro Thr Cys Glu Thr Leu Gly Ser Arg Lys Ala Gln Asp Leu Gly
50 55 60

Ala Gly Tyr Tyr Val Ser Val His *
65 70 72

<210> 1932 <211> 68 <212> PRT <213> Homo sapiens

<210> 1933 <211> 47 <212> PRT <213> Homo sapiens

<210> 1934 <211> 86 <212> PRT <213> Homo sapiens

Ala Val His Arg Lys Ala Gly Asp Thr Glu Val Gln Gln Ser Leu Leu 65 70 75 80

Leu Leu Lys Lys *

85

<210> 1935 <211> 76 <212> PRT <213> Homo sapiens

<210> 1936 <211> 49 <212> PRT <213> Homo sapiens

<210> 1937 <211> 76 <212> PRT <213> Homo sapiens

50 55 60 Glu Ile Lys Phe Tyr Ile Gln Leu Ala Lys Lys Lys 65 70 75 76

<210> 1938 <211> 191 <212> PRT <213> Homo sapiens

<400> 1938 Met Ala Asp Glu Lys Thr Phe Arg Ile Gly Phe Ile Val Leu Gly Leu 10 Phe Leu Leu Ala Leu Gly Thr Phe Leu Met Ser His Asp Arg Pro Gln 20 25 Val Tyr Gly Thr Phe Tyr Ala Met Gly Ser Val Met Val Ile Gly Gly 35 40 Ile Ile Trp Ser Met Cys Gln Cys Tyr Pro Lys Ile Thr Phe Val Pro 55 60 Ala Asp Ser Asp Phe Gln Gly Ile Leu Ser Pro Lys Ala Met Gly Leu 75 Leu Glu Asn Gly Leu Ala Ala Glu Met Lys Ser Pro Ser Pro Gln Pro 85 90 95 Pro Tyr Val Arg Leu Trp Glu Glu Ala Ala Tyr Asp Gln Ser Leu Pro 105 Asp Phe Ser His Ile Gln Met Lys Val Met Ser Tyr Ser Glu Asp His 120 125 Arg Ser Leu Leu Ala Pro Glu Met Gly Gln Pro Lys Leu Gly Thr Ser 135 140 Asp Gly Gly Gly Gly Pro Gly Asp Val Gln Ala Trp Met Glu Ala 150 155 Ala Val Val Ile His Lys Gly Leu Asn Glu Ser Glu Gly Glu Arg Arg 165 170 175 Leu Thr Gln Ser Trp Pro Gly Pro Leu Ala Cys Pro Gln Gly Pro

185

<210> 1939 <211> 82 <212> PRT <213> Homo sapiens

<400> 1939 Met Val Arg Ser Ile Arg Leu Leu Phe Phe Phe Gly Trp Gly Phe Ser 10 1 5 Thr Thr Gln Gln Pro Ser Leu Cys Gln Asn Ser Leu Met Phe Pro Asp 20 25 Gly Ser Ser Phe Thr Pro Leu Ser Glu Ala Pro Lys Gly Ser Phe Pro 35 40 Gly Val Trp Thr Thr His Ser Ser Leu Ser Pro Asp Thr Pro Pro 55 60 Trp Val His Ser Ala Gly Trp Val Gln Thr Lys Trp Asn Pro Trp Asn 70 Leu * 81

<210> 1940 <211> 101 <212> PRT <213> Homo sapiens

>

<210> 1941 <211> 88 <212> PRT <213> Homo sapiens

<400> 1941 Met Lys Ala Ser Val Leu Ser Pro Ser Phe Leu Leu Val Leu Trp Ser 10 Cys Phe Leu Ser Cys Ser Cys Met Glu Pro Gln Ser Gly Phe Pro Arg 20 25 Pro Ser Cys Phe Thr Val Gly Phe Leu Leu Arg Arg Arg Thr Lys Thr 35 40 Arg Arg Gln Lys Ala Thr Asn Thr Val Lys Met Arg Thr Thr Lys Ile 55 60 Leu Lys Ile Lys Ile Asp Lys Arg Arg Trp Pro Thr Arg Met Ser Ser . **75** 70 Lys Trp Asn Pro Lys Glu Trp 85

<210> 1942 <211> 46 <212> PRT <213> Homo sapiens

20 25 30
Phe Gly Ser Arg Asp Val Lys Trp Arg Cys Cys His Leu *
35 40 45

<210> 1943 <211> 155 <212> PRT <213> Homo sapiens

<400> 1943 Met Phe Thr Leu Leu Val Leu Leu Ser Gln Leu Pro Thr Val Thr Leu 5 10 Gly Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly 25 30 Glu Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg • 35 40 Arg Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn 55 Leu Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg 70 75 Glu Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr 90 Ser Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile 100 105 110 Asp Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu 115 120 125 Val Ile Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn 135 Arg Leu Gln His Pro Cys Ser Ser Ala Val Tyr 145 150

<210> 1944 ...
<211> 61
<212> PRT
<213> Homo sapiens

<210> 1945 <211> 79 <212> PRT <213> Homo sapiens

<210> 1946 <211> 72 <212> PRT <213> Homo sapiens

<210> 1947 <211> 56 <212> PRT <213> Homo sapiens

<210> 1948 <211> 48 <212> PRT <213> Homo sapiens

<400> 1948

<210> 1949

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1949

Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala 5 10. His Pro Asp Arg Ile Ile Phe Pro Asn His Ala Cys Glu Asp Pro Pro 25 Ala Val Leu Leu Glu Val Gln Gly Thr Leu Gln Arg Pro Leu Val Arg 40 Asp Ser Arg Thr Ser Pro Ala Asn Cys Thr Trp Leu Ile Leu Gly Ser 55 60 Lys Glu Gln Thr Val Thr Ile Arg Phe Gln Lys Leu His Leu Ala Cys 70 75 80 Gly Ser Glu Arg Leu Thr Leu Arg Ser Pro Leu Gln Pro Leu Ile Ser 85 90 Leu Cys Glu Ala Pro Pro Ser Pro Leu Gln Leu Pro Gly Gly Asn Val 100 105 Thr Ile Thr Tyr Ser Tyr Ala Gly Ala Lys Arg Pro Gln Gly His Gly 115 120 Phe Phe Cys Phe Leu Lys Ala Lys

135 136

<210> 1950

<211> 78

<212> PRT

<213> Homo sapiens

<400> 1950

 Met
 Trp
 Ile
 Tyr
 Phe
 Trp
 Thr
 Leu
 Asn
 Ser
 Val
 Pro
 Val
 Ile
 Tyr
 Met

 Ser
 Thr
 Leu
 Met
 Ser
 Ile
 Pro
 His
 Tyr
 Phe
 Asp
 Tyr
 Cys
 Phe
 Ile

 Val
 Ser
 Asp
 Ile
 Met
 Leu
 Pro
 Glu
 Ile
 Thr
 Phe
 Ser
 Thr
 Phe
 Ile
 Leu

 Leu
 Leu
 Met
 Val
 Ala
 Leu
 Ala
 Ile
 Arg
 Gly
 Pro
 Leu
 His
 Phe
 Arg
 A

<210> 1951

<211> 89 <212> PRT <213> Homo sapiens

<400> 1951

<210> 1952 <211> 47 <212> PRT <213> Homo sapiens

<210> 1953 <211> 56 <212> PRT <213> Homo sapiens

<210> 1954 <211> 425 <212> PRT <213> Homo sapiens

<400> 1954 Met Thr Leu Arg Pro Gly Thr Met Arg Leu Ala Cys Met Phe Ser Ser 10 Ile Leu Leu Phe Gly Ala Ala Gly Leu Leu Leu Phe Ile Ser Leu Gln 20 25 Asp Pro Thr Glu Leu Ala Pro Gln Gln Val Pro Gly Ile Lys Phe Asn 40 Ile Arg Pro Arg Gln Pro His His Asp Leu Pro Pro Gly Gly Ser Gln 55 60 Asp Gly Asp Leu Lys Glu Pro Thr Glu Arg Val Thr Arg Asp Leu Ser 70 75 Ser Gly Ala Pro Arg Gly Arg Asn Leu Pro Ala Pro Asp Gln Pro Gln 85 90 Pro Pro Leu Gln Arg Gly Thr Arg Leu Arg Leu Arg Gln Arg Arg 105 110 Arg Leu Leu Ile Lys Lys Met Pro Ala Ala Ala Thr Ile Pro Ala Asn 120 125 Ser Ser Asp Ala Pro Phe Ile Arg Pro Gly Pro Gly Thr Leu Asp Gly 135 140 Arg Trp Val Ser Leu His Arg Ser Gln Glu Arg Lys Arg Val Met 150 155 Gln Glu Ala Cys Ala Lys Tyr Arg Ala Ser Ser Ser Arg Arg Ala Val 165 170 Thr Pro Arg His Val Ser Arg Ile Phe Val Glu Asp Arg His Arg Val 185 . Leu Tyr Cys Glu Val Pro Lys Ala Gly Cys Ser Asn Trp Lys Arg Val 200 205 Leu Met Val Leu Ala Gly Leu Ala Ser Ser Thr Ala Asp Ile Gln His 215 220 Asn Thr Val His Tyr Gly Ser Ala Leu Lys Arg Leu Asp Thr Phe Asp 230 235 240 Arg Gln Gly Ile Leu His Arg Leu Ser Thr Tyr Thr Lys Met Leu Phe 245 250 Val Arg Glu Pro Phe Glu Arg Leu Val Ser Ala Phe Arg Asp Lys Phe 265 Glu His Pro Asn Ser Tyr Tyr His Pro Val Phe Gly Lys Ala Ile Leu 280 Ala Arg Tyr Arg Ala Asn Ala Ser Arg Glu Ala Leu Arg Thr Gly Ser 295 300 Gly Val Arg Phe Pro Glu Phe Val Gln Tyr Leu Leu Asp Val His Arg 310 315 Pro Val Gly Met Asp Ile His Trp Asp His Val Ser Arg Leu Cys Ser 325 330 Pro Cys Leu Ile Asp Tyr Asp Phe Val Gly Lys Phe Glu Ser Met Glu 345 Asp Asp Ala Asn Phe Phe Leu Ser Leu Ile Arg Ala Pro Arg Asn Leu 360 Thr Phe Pro Arg Phe Lys Asp Arg His Ser Gln Glu Ala Arg Thr Thr · 380 375 Ala Arg Ile Ala His Gln Tyr Phe Ala Gln Leu Ser Ala Leu Gln Arg 390 395 Gln Arg Thr Tyr Asp Phe Tyr Tyr Met Asp Tyr Leu Met Phe Asn Tyr 410 Ser Lys Pro Phe Ala Asp Leu Tyr * 420 424

<210> 1955 <211> 106 <212> PRT <213> Homo sapiens

<210> 1956 <211> 139 <212> PRT <213> Homo sapiens

_

<400> 1956 Met Val Leu Pro Phe Ile Cys Asn Leu Leu Arg Arg His Pro Ala Cys 1 . 5 10 Arg Val Leu Val His Arg Pro His Gly Pro Glu Leu Asp Ala Asp Pro 25 Tyr Asp Pro Gly Glu Glu Asp Pro Ala Gln Ser Arg Ala Leu Glu Ser 40 Ser Leu Trp Glu Leu Gln Ala Leu Gln Arg His Tyr His Pro Glu Val 55 60 Ser Lys Ala Ala Ser Val Ile Asn Gln Ala Leu Ser Met Pro Glu Val 70 75 Ser Ile Ala Pro Leu Leu Glu Leu Thr Ala Tyr Glu Ile Phe Glu Arg 90 Asp Leu Lys Lys Gly Pro Glu Pro Val Pro Thr Gly Val Leu Ser 100 105 Gln Pro Arg Ala Cys Trp Asp Gly Arg Val Lys Leu Cys Ala Gln His 115 120 Phe His Ala Gln Leu Thr Leu Ala His Leu * 130 135

<210> 1957 <211> 87 <212> PRT <213> Homo sapiens

<210> 1958 <211> 48 <212> PRT <213> Homo sapiens

<210> 1959 <211> 65 <212> PRT <213> Homo sapiens

<210> 1960 <211> 78 <212> PRT <213> Homo sapiens

<400> 1960

 Met
 Ser
 Tyr
 Val
 Arg
 His
 Val
 Leu
 Ser
 Cys
 Leu
 Gly
 Gly
 Leu
 Ala
 Ala
 15
 15
 Leu
 10
 15
 15
 Leu
 Ala
 15
 Leu
 15
 Leu
 Gly
 His
 Cys
 20
 25
 25
 20
 30
 Val
 Val
 Val
 Ser
 Glu
 Glu
 Glu
 Leu
 Leu
 Pro
 Asn
 Ser
 Gly
 His
 Ser
 Gly
 His
 Ser
 Gly
 His
 Asp
 Leu
 Pro
 Asn
 Ser
 Gly
 His
 Asp
 Leu
 Fro
 Leu
 Pro
 Asn
 Ser
 Gly
 His
 Asp
 Leu
 Fro
 Leu
 Pro
 Asp
 Leu
 Pro
 Pro
 Asp
 Leu
 Pro
 Pro
 Asp
 Leu
 Pro
 Pro
 Pro
 Pro
 Pro
 Pro
 Pro
 Pro

<210> 1961 <211> 77 <212> PRT <213> Homo sapiens

<210> 1962 <211> 65 <212> PRT <213> Homo sapiens

<210> 1963 <211> 53 <212> PRT <213> Homo sapiens <221> misc_feature

<222> (1)...(53)
<223> Xaa = any amino acid or nothing

<210> 1964 <211> 232 <212> PRT <213> Homo sapiens

<400> 1964 Met Pro Ser Val His Arg Leu Leu Gly Pro Gln Pro Val Pro Ser Arg 10 Arg Leu Arg Leu Ala Leu Ala Leu Leu Leu Ser Leu Gln Val Val Val 25 Phe Phe Leu Val Val Leu Gly Gln Gly Arg Leu Leu Gln Pro Cys Arg 40 Gly Cys Leu Glu Leu Pro Gly Gly Pro Gly Glu Ala Glu Asp His Gly 55 Asp Leu Gly Gln Gly Trp Val Gly Leu Leu Gln Ala Leu Asp Pro Leu 70 75 Ser His Arg Arg Leu Val Met Ser Thr Arg His Ala His Gly Glu Asp 85 90 Arg Ala Phe Leu His Phe Ile Asp Val Lys Leu Val Val Val Pro Ala 100 105 110 Thr Pro His Ile Leu Gln Val Gln Leu His Arg Val Val Glu Val Pro 115 120 Leu Leu Arg Arg Leu Phe His Phe Pro Leu Leu Arg Gly Gln Gln Val 135 140 Ser Ser Glu Asp Val Val Ile His Thr Leu Val Ala Glu Pro Gln Gly 150 155 Glu Gly Ala Leu Asn Lys Asp Arg Pro Gly Trp Ile Val Ala Gly Gln 165 170 Gly Gly Leu Leu Ile Gly Thr Leu Asp Ser Trp Cys Gly Asp Ile His 180 185 Ala Leu Cys Pro Thr Met Trp Gly Trp Gly Gly Ser Ala Ala Pro Val 1.95 200 205 Glu Ser Leu Gly Lys Gly Thr Ser Gly Glu Gly Asp Gly Arg Arg Gln 215 Gly Gln Arg Thr Gly Pro Gly * 230 231

<210> 1965 <211> 253 <212> PRT

<213> Homo sapiens

<400> 1965 Met Gly Cys Ala Ile Ile Ala Gly Phe Leu His Tyr Leu Phe Leu Ala Cys Phe Phe Trp Met Leu Val Glu Ala Val Ile Leu Phe Leu Met Val 20 25 Arg Asn Leu Lys Val Val Asn Tyr Phe Ser Ser Arg Asn Ile Lys Met Leu His Ile Cys Ala Phe Gly Tyr Gly Leu Pro Met Leu Val Val Val 55 Ile Ser Ala Ser Val Gln Pro Gln Gly Tyr Gly Met His Asn Arg Cys Trp Leu Asn Thr Glu Thr Gly Phe Ile Trp Ser Phe Leu Gly Pro Val 85 90 Cys Thr Val Ile Val Ile Asn Ser Leu Leu Leu Thr Trp Thr Leu Trp 100 ' 105 Ile Leu Arg Gln Arg Leu Ser Ser Val Asn Ala Glu Val Ser Thr Leu 115 120 125 Lys Asp Thr Arg Leu Leu Thr Phe Lys Ala Phe Ala Gln Leu Phe Ile 135 Leu Gly Cys Ser Trp Val Leu Gly Ile Phe Gln Ile Gly Pro Val Ala 150 155 Gly Val Met Ala Tyr Leu Phe His His His Gln Gln Pro Ala Gly Gly 170 175 165 Leu His Leu Pro His Pro Leu Ser Ala Gln Arg Pro Gly Thr Arg Arg 185 Ile Gln Glu Val Asp His Trp Glu Asp Glu Ala Gln Leu Pro Val Pro 200 Asp Leu Lys Asp Leu Ala Val Leu His Ala Ile Arg Phe Gln Asp Gly 215 220 Leu Lys Ser Phe Leu Ala Phe Lys Tyr Ala Met Glu Pro Thr Val Gly 230 235 Gly Thr Ser Ser Phe Pro Cys Arg Glu Pro Tyr Pro 250

<210> 1966 <211> 649 <212> PRT <213> Homo sapiens

<400> 1966 Met Val Thr Cys Phe Ile Ile Gly Leu Leu Phe Pro Val Phe Ser Val 5 10 Cys Tyr Leu Ile Ala Pro Lys Ser Pro Leu Gly Leu Phe Ile Arg Lys 20 25 Pro Phe Ile Lys Phe Ile Cys His Thr Ala Ser Tyr Leu Thr Phe Leu 40 Phe Leu Leu Leu Ala Ser Gln His Ile Asp Arg Ser Asp Leu Asn . 60 Arg Gln Gly Pro Pro Pro Thr Ile Val Glu Trp Met Ile Leu Pro Trp 75 Val Leu Gly Phe Ile Trp Gly Glu Ile Lys Gln Met Trp Asp Gly Gly 90 Leu Gln Asp Tyr Ile His Asp Trp Trp Asn Leu Met Asp Phe Val Met

| | | | 100 | | | | | 105 | | | | | 110 |) | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asn | Ser | Leu
115 | Тут | Leu | Ala | Thr | Ile
120 | | Leu | Lys | Ile | Val
125 | | Phe | Val |
| Lys | Tyr
130 | Ser | Ala | Leu | Asn | Pro
135 | | Glu | Ser | Trp | Asp
140 | | Trp | His | Pro |
| Thr
145 | | Val | Ala | Glu | Ala
150 | Leu | Phe | Ala | Ile | Ala
155 | | Ile | Phe | ser | Ser
160 |
| Leu | Arg | Leu | Ile | Ser
165 | Leu | Phe | Thr | Ala | Asn
170 | | His | Leu | Gly | Pro
175 | |
| | | | Leu
180 | | | | | 185 | _ | | | _ | 190 | | |
| | | 195 | Leu | | | | 200 | | | | _ | 205 | | | |
| Tyr | Phe
210 | Tyr | Tyr | Glu | Glu | Thr
215 | Lys | Gly | Leu | Thr | Сув
220 | Lys | Gly | ·Ile | Arg |
| 225 | | | Gln | | 230 | | | | | 235 | | | | | 240 |
| | | | Trp | 245 | | | | | 250 | | | | • | 255 | |
| | | | Gln
260 | | | | | 265 | | | _ | | 270 | | |
| _ | | 275 | Asn | _ | | | 280 | | | | | 285 | | | |
| | 290 | | Asn | | | 295 | | | | | 300 | | | _ | |
| 305 | | | Phe | | 310 | | | | | 315 | | | | | 320 |
| | | | Leu | 325 | | | | | 330 | | | | | 335 | |
| Leu | Trp | Tyr | Leu
340 | Ile | Lys | Trp | Ile | Trp
345 | Thr | His | Leu | Сув | Lys
350 | Lys | Lys |
| | | 355 | Lys | | | | 360 | | | | | 365 | _ | | |
| | 370 | | Arg | | | 375 | | | | | 380 | | _ | | |
| 385 | | | Tyr | | 390 | | | | | 395 | | | | | 400 |
| | | | Glu | 405 | | | | | 410 | | | | | 415 | |
| | | | Glu
420 | | | | | 425 | | | | | 430 | | |
| | | 435 | Ala | | | | 440 | | | | | 445 | | _ | |
| | 450 | | Ser | | | 455 | | | | | 460 | _ | | - | |
| 465 | | | Phe | | 470 | | | | | 475 | | _ | | | 480 |
| Ile | Ala | Ser | Glu | Arg
485 | His | Asn | Ile | Ser | Asn
490 | Gly | Ser | Ala | Leu | Val
495 | Val |
| Gln | Glu | Pro | Pro
500 | Arg | Glu | Lys | Gln | Arg
505 | Lys | Val | Asn | Phe | Val
510 | Thr | Asp |
| Ile | ГÀг | Asn
515 | Phe | Gly | Leu | Phe | His
520 | Arg | Arg | Ser | Lys | Gln
525 | Asn | Ala | Ala |
| Glu | Gln
530 | Asn | Ala | Asn | Gln | Ile
535 | Phe | Ser | Val | Ser | Glu
540 | Glu | Val | Ala | Arg |
| Gln
545 | Gln | Ala | Ala | | Pro
550 | Leu | Glu | Arg | Asn | Ile
555 | Gln | Leu | Glu | Ser | Arg
560 |
| Gly | Leu | Ala | Ser | Arg
565 | Gly | Asp | Leu | Ser | Ile
570 | Pro | Gly | Leu | Ser | Glu
575 | Gln |
| | | | | | | | | | | | | | | | |

<210> 1967 <211> 80 <212> PRT <213> Homo sapiens

50 55 60 Gln Gln Ala Glu Asp Ser Ala His Lys Thr Gly Leu Val Ser Trp * 65 70 75 79

<210> 1968 <211> 49 <212> PRT <213> Homo sapiens

<210> 1969 <211> 150 <212> PRT <213> Homo sapiens

<400> 1969
Met His Val His Phe Trp Leu Val Thr Ala Ser Phe Ser Ser Val

10 Ala Trp Thr Thr Ala Glu Ile Thr Gly Gly Val Ser Gly Val Ala Ala Gly Val Gly Ser Trp Glu Gly Gly Ser Glu Arg Gly Asp Arg Phe Gly 40 Asp Phe Phe Thr Leu Asn Val Ser Val Phe Arg Gly Val Phe Phe Phe 55 Leu Ala Gly Leu Phe Ser Pro Ser Pro Ser Thr Pro Leu Ala Ser Ile 70 75 Ala Leu Ala Gly Ile Ser Lys Glu Ala Gly Asp Leu Glu Gly Glu Leu 85 90 Gly Val Leu Glu Asp Val Leu Lys Gly Ser Thr Asp Ser Ser Gln Val 105 Ser Gly Ser Lys Leu Tyr Asp Cys Trp Gly Ser Leu Gly Asp Ser Cys 120 Ile Phe Glu Val Glu Glu Lys Gly Leu Lys Leu Gly Ser Ser His Leu 135 Ser Ile Ser Lys Val *

<210> 1970 <211> 48 <212> PRT <213> Homo sapiens

<400> 1970

<210> 1971 <211> 64 <212> PRT <213> Homo sapiens

<210> 1972 <211> 211 <212> PRT

Tyr Val Phe Ala Ile Ile Gly Ile Asn Leu Phe Arg Gly Val Ile Val 55 Ala Leu Pro Gly Asn Ser Ser Leu Ala Pro Ala Asn Gly Ser Ala Pro 75 70 Cys Gly Ser Phe Glu Gln Leu Glu Tyr Trp Ala Asn Asn Phe Asp Asp 90 95 85 Phe Xaa Ala Ala Leu Val Thr Leu Trp Asn Leu Met Val Val Asn Asn 105 Trp Gln Val Phe Leu Asp Ala Tyr Arg Arg Tyr Ser Gly Pro Trp Ser 120 125 Lys Ile Tyr Phe Val Leu Trp Trp Leu Val Ser Ser Val Ile Trp Val 130 135 140 Asn Leu Phe Leu Ala Leu Ile Leu Glu Asn Phe Leu His Lys Trp Asp 150 155

Cys Arg *

<210> 1973 <211> 53 <212> PRT <213> Homo sapiens

<210> 1974 <211> 50

<212> PRT <213> Homo sapiens

<400> 1974

 Met Gly Val
 Thr Thr Ala
 Thr Leu
 Ile Ala Pro Ala
 Leu Arg Thr Leu
 15

 1
 5
 10
 15

 Arg Thr Ser Ala Val
 Cys Ser Thr Thr Ala Glu Thr Ser Phe Ser Ala
 30

 Cys Thr Phe Val
 Ser Thr Ser Cys Ser Lys Lys Gly Thr Pro Arg Phe

 35
 40

 Ser *

 49

<210> 1975 <211> 87 <212> PRT <213> Homo sapiens

<400> 1975

 Met
 Cys
 Ser
 Ser
 Pro
 Ala
 Val
 Leu
 Cys
 Ala
 Leu
 Val
 Leu
 Val
 Gly
 Cys
 Ala
 Cys
 Ala
 Leu
 Val
 Leu
 Leu
 Leu
 Ala
 Asp
 Pro
 Gly
 Ser
 Met
 Gln
 Ala
 Asp
 Pro
 Gly
 Ser
 Met
 Gly
 Trp
 Leu

 Ger
 Ser
 Leu
 Gly
 Leu
 His
 Gln
 Ala
 Ser
 Val
 Val
 Ser
 Ala
 Gly
 Trp
 Leu

 Gly
 Gln
 Ala
 Arg
 His
 Gly
 Ala
 His
 Leu
 Yal
 Ser
 Leu
 Leu
 Pro
 Ser

 Gly
 Val
 His
 Gly
 Leu
 Trp
 Arg
 Pro
 Ser
 Val
 Gln
 Pro
 Arg
 Arg
 Pro
 80

 Gly
 Val
 His
 Gly
 Leu
 Trp

<210> 1976 <211> 107 <212> PRT <213> Homo sapiens

<400> 1976

Met Ala Leu Tyr Glu Leu Phe Ser His Pro Val Glu Arg Ser Tyr Arg 1 5 10 Ala Gly Leu Cys Ser Lys Ala Ala Leu Phe Leu Leu Leu Ala Ala Ala 20 25 Leu Thr Tyr Ile Pro Pro Leu Leu Val Ala Phe Arg Ser His Gly Phe 35 40 Trp Leu Lys Arg Ser Ser Tyr Glu Glu Gln Pro Thr Val Arg Phe Gln 55 His Gln Val Leu Leu Val Ala Leu Leu Gly Pro Glu Ser Asp Gly Phe 70 75 Leu Ala Trp Ser Thr Phe Pro Ala Phe Asn Arg Gln Gln Gly Asp Arg 85 95 Leu Arg Val Pro Leu Val Ser Trp Arg Arg * 105 106

<210> 1977 <211> 134 <212> PRT <213> Homo sapiens

<400> 1977 Met Val Thr Val Ala Met Ala Cys Ser Gly Ala Leu Thr Ala Leu Cys 1 .5 10 Cys Leu Phe Val Ala Met Gly Val Leu Arg Val Pro Trp His Cys Pro 25 Leu Leu Val Thr Glu Gly Leu Leu Asp Met Leu Ile Ala Gly Gly 40 Tyr Ile Pro Ala Leu Tyr Phe Tyr Phe His Tyr Leu Ser Ala Ala Tyr 55 Gly Ser Pro Val Cys Lys Glu Arg Gln Ala Leu Tyr Gln Ser Lys Gly 70 Tyr Ser Gly Phe Gly Cys Ser Phe His Gly Ala Asp Ile Gly Ala Gly 85 90 Ile Phe Ala Ala Leu Gly Ile Val Val Phe Ala Leu Gly Ala Val Leu 105 Ala Ile Lys Gly Tyr Arg Lys Val Arg Lys Leu Lys Glu Lys Pro Ala 115 Glu Met Phe Glu Phe * 130 133

<210> 1978 <211> 61 <212> PRT <213> Homo sapiens

<400> 1978 Met Thr Leu Arg Met Leu Val Pro Arg Leu Leu Leu Thr Arg Gln Leu 5 Val Trp Phe Phe Ser Ala Ala Thr Glu Arg Asp Pro Glu Met Met Asn 20 25 Gly Ile Pro Arg Lys Leu Met Ser Phe Pro Pro Ser Ser Val Thr Ser 40 Arg Arg Ser Arg Gly His His Leu Gln Ser Leu * 50

<210> 1979 <211> 66 <212> PRT <213> Homo sapiens

<400> 1979 Met Leu Thr Ala Leu Pro Lys Ser Phe Val Phe Lys Val Val Gly Glu · 5 Trp Trp Trp Leu Phe Ile Cys Leu Val Leu Ala Phe Ala Asp Gly Lys

20 25 30

Arg His Lys Tyr Ser Tyr Asp Ala Asn Val Phe Leu Gln Val Asn Tyr
35 40 45

Ile Thr Trp Pro Asp Ser Phe Ser Pro Val Pro Ser Leu Pro Pro Ile
50 55 60

Leu *
65

<210> 1980 <211> 51 <212> PRT <213> Homo sapiens

<210> 1981 <211> 79 <212> PRT <213> Homo sapiens

<210> 1982 <211> 156 <212> PRT <213> Homo sapiens

Asn Tyr Asp Ile Cys Lys Val Tyr Leu Ala Arg Trp Gly Ile Gln Gly 40 Arg Trp Met Lys Gln Asp Pro Arg Arg Trp Gly Asn Pro Ala Arg Ala 55 Pro Arg Pro Gly Gln Arg Ala Pro Gln Pro Gln Pro Pro Pro Gly Pro Leu Pro Gln Ala Pro Gln Ala Val His Thr Leu Arg Gly Asp Ala His 85 90 Ser Pro Pro Leu Met Thr Phe Gln Ser Ser Ser Ala Trp Glu Gly Ala 100 105 Ser Gln Gln Glu Ile Pro Glu Asn Glu Glu Thr Glu Lys Gly Asp 1:15 120 125 Asp Gln Ile Ser Ser Phe Leu Gly Val Thr Ser Asn Thr Lys Glu Ala 135 Ser Val Ile Gly Ile Gln Lys Thr Val Asp Val Leu

<210> 1983 <211> 63 <212> PRT <213> Homo sapiens

<210> 1984 <211> 232 <212> PRT <213> Homo sapiens

<400> 1984

 Met
 Phe
 His
 Arg
 Cys
 Gly
 Ile
 Met
 Ala
 Leu
 Val
 Ala
 Ala
 Tyr
 Leu
 Asn

 Phe
 Val
 Ser
 Gln
 Met
 Ile
 Ala
 Val
 Pro
 Ala
 Phe
 Cys
 Gln
 His
 Val
 Ser

 Lys
 Val
 Ile
 Glu
 Ile
 Arg
 Thr
 Met
 Glu
 Ala
 Pro
 Tyr
 Phe
 Leu
 Pro
 Glu

 His
 Ile
 Phe
 Arg
 Asp
 Lys
 Cys
 Met
 Leu
 Pro
 Lys
 Ser
 Leu
 Glu
 Lys
 His

 Glu
 Lys
 Asp
 Leu
 Thr
 Asn
 Lys
 Ile
 Ala
 Glu
 Ser
 Leu
 Gly

 65
 His
 Fro
 His
 Leu
 Thr
 Asn
 Lys
 Ile
 Ala
 Glu
 Ser
 Leu
 Gly

 65
 His
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro

Gly Lys Trp Asp Ile Val Leu Arg Asp Cys Gln Phe Arg Met Leu Pro 85 90 95 Gln Val Thr Asp Glu Asp Arg Leu Ser Arg Arg Lys Ser Ile Val Asp 100 105 110

Thr Val Ser Ile Gln Val Asp Ile Leu Ser Asn Asn Val Pro Ser Asp

120 Asp Val Val Ser Asn Thr Glu Glu Ile Thr Phe Glu Ala Leu Lys Lys 135 140 130 Ala Ile Asp Thr Ser Gly Met Glu Glu Glu Lys Glu Lys Arg Arg 150 155 Leu Val Ile Glu Lys Phe Gln Lys Ala Pro Phe Glu Glu Ile Ala Ala 165 170 Gln Cys Glu Ser Lys Ala Asn Leu Leu His Asp Arg Leu Ala Gln Ile 185 Leu Glu Leu Thr Ile Arg Pro Pro Pro Ser Pro Ser Gly Thr Leu Thr 200 Ile Thr Ser Gly His Ala Gln Tyr Gln Ser Val Pro Val Tyr Glu Met 220 215 Lys Phe Pro Asp Leu Cys Val Tyr 230 232

<210> 1985 <211> 141 <212> PRT <213> Homo sapiens

<400> 1985

Met Asn Leu Ser Leu Pro Phe Leu Cys Leu Phe Leu Leu Ser Phe Ser 5 10 Phe Lys Leu Ala Leu Gln Leu Arg Lys Val Ser Leu Leu Ser Leu Arg 20 25 Leu Trp Gly Gln Ser Ile Cys Cys Leu Glu Lys Glu Gly Asn Gln Asp 35 40 Ser Ser Gly Thr Gln Met Ser Ser Ser Leu Ala Leu Leu Asn Pro Leu 55 Leu His Asn Trp Ser Phe Ile Leu Ala Leu Asn Asp Pro Ala Gly His 70 75 His Gly Phe Leu Phe Leu Leu Val Phe Phe Phe Ser Glu Thr Glu Ser 85 90 His Ser Val Thr Gln Ala Gly Val Gln Trp Arg Asp Leu Ser Ser Leu 100 105 Gln Pro Leu Pro Pro Gly Phe Lys Arg Phe Phe Cys Leu Ser Leu Pro 120 Ser Ser Trp Asp Tyr Arg Cys Ala Thr Thr Pro Gly * 135

<210> 1986 <211> 292 <212> PRT <213> Homo sapiens

Asn Glu Thr Leu Lys His Leu Thr Asn Asp Thr Thr Thr Pro Glu Ser Thr Met Thr Ser Gly Gln Ala Arg Ala Ser Thr Gln Ser Pro Gln Ala 70 Leu Glu Asp Ser Gly Pro Val Asn Ile Ser Val Ser Ile Thr Leu Thr 90 Leu Asp Pro Leu Lys Pro Phe Gly Gly Tyr Ser Arg Asn Val Thr His 100 105 Leu Tyr Ser Thr Ile Leu Gly His Gln Ile Gly Leu Ser Gly Arg Glu 120 125 Ala His Glu Glu Ile Asn Ile Thr Phe Thr Leu Pro Thr Ala Trp Ser 135 140 Ser Asp Asp Cys Ala Leu His Gly His Cys Glu Gln Val Val Phe Thr 150 155 Ala Cys Met Thr Leu Thr Ala Ser Pro Gly Val Phe Pro Val Thr Val . 165 170 Gln Pro Pro His Cys Val Pro Asp Thr Tyr Ser Asn Ala Thr Leu Trp 185 Tyr Lys Ile Phe Thr Thr Ala Arg Asp Ala Asn Thr Lys Tyr Ala Gln 200 Asp Tyr Asn Pro Phe Trp Cys Tyr Lys Gly Ala Ile Gly Lys Val Tyr 210 215 His Ala Leu Asn Pro Lys Leu Thr Val Ile Val Pro Asp Asp Asp Arg 225 230 235 Ser Leu Ile Asn Leu His Leu Met His Thr Ser Tyr Phe Leu Phe Val 250 Met Val Ile Thr Met Phe Cys Tyr Ala Val Ile Lys Gly Arg Pro Ser 265 270 Lys Leu Arg Gln Ser Asn Pro Glu Phe Cys Pro Glu Lys Val Ala Leu 275 280 Ala Glu Ala * 290 291

<210> 1987 <211> 186 <212> PRT <213> Homo sapiens

Met Ala Gly Pro Arg Pro Arg Trp Arg Asp Gln Leu Leu Phe Met Ser Ile Ile Val Leu Val Ile Val Val Ile Cys Leu Met Leu Tyr Ala Leu

<400> 1987

20 25 Leu Trp Glu Ala Gly Asn Leu Thr Asp Leu Pro Asn Leu Arg Ile Gly 40 Phe Tyr Asn Phe Cys Leu Trp Asn Glu Asp Thr Ser Thr Leu Gln Cys 55 60 His Gln Phe Pro Glu Leu Glu Ala Leu Gly Val Pro Arg Val Gly Leu **75** . Gly Leu Ala Arg Leu Gly Val Tyr Gly Ser Leu Val Leu Thr Leu Phe 90 Ala Pro Gln Pro Leu Leu Leu Ala Gln Cys Asn Ser Asp Glu Arg Ala 100 105

Trp Arg Leu Ala Val Gly Phe Leu Ala Val Ser Ser Val Leu Leu Ala 120

Gly Gly Leu Gly Leu Phe Leu Ser Tyr Val Trp Lys Trp Val Arg Leu

<210> 1988 <211> 47 <212> PRT <213> Homo sapiens

<210> 1989 <211> 58 <212> PRT <213> Homo sapiens

<210> 1990 <211> 80 <212> PRT <213> Homo sapiens

Thr His Trp Ala Val Cys Gly Cys Gly Phe Ile Ser Glu Lys Leu * 65 70 75 79

<210> 1991

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1991

 Met Val Arg Trp Lys Arg Glu Ile His Glu Leu Leu Trp Pro Leu Trp 1
 5
 10
 15
 15

 Phe Cys Ser Trp Pro Arg Val Phe Glu Lys Gln Arg Ser Met Thr Asp 20
 25
 30

 Phe Thr Cys Ser Ala Phe Ser Ala Phe Cys Leu Phe Cys Cys Pro * 35
 45
 47

<210> 1992

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1992

<210> 1993

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1993

<210> 1994 <211> 52 <212> PRT <213> Homo sapiens

<210> 1995 <211> 164 <212> PRT <213> Homo sapiens

<400> 1995 Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala His Pro Asp Arg Ile Ile Phe Pro Asn His Ala Cys Glu Asp Pro Pro 20 25 Ala Val Leu Leu Glu Val Gln Gly Thr Leu Gln Arg Pro Leu Val Arg 40 45 Asp Ser Arg Thr Ser Pro Ala Asn Cys Thr Trp Leu Ile Leu Gly Ser 55 60 Lys Glu Arg Thr Val Thr Ile Arg Phe Gln Lys Leu His Leu Ala Cys Gly Ser Glu Arg Leu Thr Leu Arg Ser Pro Leu Gln Pro Leu Ile Ser 85 90 · Leu Cys Glu Ala Pro Pro Ser Pro Leu Gln Leu Pro Gly Gly Asn Val 105 100 110 Thr Ile Thr Tyr Ser Tyr Ala Gly Gly Gln Ser Thr His Gly Pro Gly 120 Leu Pro Ala Leu Leu Gln Ala Ser Pro Ser Pro Trp Cys Leu Cys Arg 135 140 Leu Ala Asp Val Leu Ala Arg Arg Gly Ser Met Pro Glu Pro Pro Leu 155 Cys Ile Cys * 163

<210> 1996 <211> 77 <212> PRT <213> Homo sapiens

<400> 1996
Met Trp Tyr Gly Val Phe Leu Trp Ala Leu Val Ser Ser Leu Phe Phe
1 5 10 15

His Val Pro Ala Gly Leu Leu Ala Leu Phe Thr Leu Arg His His Lys
20 25 30

Tyr Gly Ala Ala Ile Ala Gly Val Tyr Arg Ala Ala Gly Lys Glu Met
35 40 45

Ile Pro Phe Glu Ala Leu Thr Leu Gly Thr Gly Gln Thr Phe Cys Val
50 55 60

Leu Val Val Ser Phe Leu Arg Ile Leu Ala Thr Leu *
65 70 75 76

<210> 1997 <211> 233 <212> PRT <213> Homo sapiens

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Ala Arg Ala Gly Gly Ser Glu
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PATENT COOPERATION TREATY

PCT

DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rule 13ter.1(c) and 39)

| Applicant's or agent's file reference | | Date of mailing (day/month/year) |
|--|---|---|
| | IMPORTANT DECLARATION | 8 7 JUN 2001 |
| 21272-018 | | 8 (0011 2001 |
| International application No. | International filing date (day/month/year) | (Earliest) Priority date (day/month/year) |
| | | |
| PCT/US01/02687 | 25 January 2001 (25.01.2001) | 25 January 2000 (25.01.2000) |
| International Patent Classification (IPC) or both national classification and IPC | | |
| | | |
| IPC(7): C12P 21/06 and US CL: 435/69.1 Applicant | | |
| Аррисан | | |
| | | |
| HYSEQ, INC. | | |
| | | |
| This International Searching Authority hereby declares, according to Article 17(2)(a), that no international search report | | |
| will be established on the international application for the reasons indicated below. | | |
| 1 ! | | |
| 1. The subject matter of the international application relates to: | | |
| a. scientific theories. | | |
| b mathematical theories | | |
| c. plant varieties. | | |
| d. animal varieties. | | |
| e. essential biological processes for the production of plants and animals, other than microbiological processes | | |
| and the products of such processes. | | |
| f. schemes, rules or methods of doing business. | | |
| g. schemes, rules or methods of performing purely mental acts. | | |
| h. schemes, rules or methods of playing games. | | |
| i. methods for treatment of the human body by surgery or therapy. | | |
| j methods for treatment of the animal body by surgery or therapy. | | |
| k. diagnostic methods practised on the human or animal body. | | |
| 1. mere presentations of information. | | |
| m. computer programs for which this International Searching Authority is not equipped to search prior art. | | |
| | | |
| 2. The failure of the following | parts of the international application to comply wi | th prescribed requirements prevents a |
| meaningful search from bein | | _ |
| the description | the claims | the drawings |
| | | A S S S S S S S S S S S S S S S S S S S |
| 3. The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C | | |
| of the Administrative Instructions prevents a meaningful search from being carried out: | | |
| the written form has not been furnished or does not comply with the standard. | | |
| the computer readable form has not been furnished or does not comply with the standard. | | |
| 4. Further comments: | | |
| To a til Miles servina miles | | |
| | | |
| | | |
| | | |
| Name and mailing address of the ISA/US Authorized officer A water | | |
| Commissioner of Patents and Trademarks | | |
| Box PCT Washington, D.C. 20231 | | |